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GEORGE E. MAYCOCK
THE ABRIDGMENT.

MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES

TO THE

TWO HOUSES OF CONGRESS

AT THE BEGINNING OF THE

FIRST SESSION OF THE FIFTY-FIRST CONGRESS,

WITH THE

REPORTS OF THE HEADS OF DEPARTMENTS

AND

SELECTIONS FROM ACCOMPANYING DOCUMENTS.

EDITED BY

W. H. MICHAEL.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1890.

NOTE.

The Abridgment of Message and Documents is compiled and distributed in pursuance to the following statutes:

SEC. 75. The Joint Committee on Public Printing shall appoint a competent person, who shall edit such portion of the documents accompanying the annual reports of the Departments as they may deem suitable for popular distribution, and prepare an alphabetical index thereto.

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SEC. 3798. Of the documents named in this section there shall be printed and bound, in addition to the usual number for Congress, the following numbers of copies, namely:

* * * * *
Second. Of the President's message, the annual reports of the Executive Departments, and the abridgment of accompanying documents, unless otherwise ordered by either house, ten thousand copies for the use of the members of the Senate and twenty-five thousand copies for the use of the members of the House of Representatives.

It may be said that the Abridgment is much in little. It is the result of boiling down about twenty thousand pages to nine hundred, without throwing out anything of real value to the reader. It has been the aim of the Joint Committee on Printing this year to furnish the Abridgment to the constituents of Senators and Members at an early day after the reports were made to Congress. It is the opinion of the committee that this precedent should be closely followed in the future. There can be no dissent from the conclusion that the Abridgment loses much of its real value by long-continued delay in its publication.

W. H. MICHAEL,

Clerk of Printing Records.

MESSAGE.

To the Senate and House of Representatives:

There are few transactions in the administration of the Government that are even temporarily held in the confidence of those charged with the conduct of the public business. Every step taken is under the observation of an intelligent and watchful people. The state of the Union is known from day to day, and suggestions as to needed legislation find an earlier voice than that which speaks in these annual communications of the President to Congress.

Good-will and cordiality have characterized our relations and correspondence with other Governments, and the year just closed leaves few international questions of importance remaining unadjusted. No obstacle is believed to exist that can long postpone the consideration and adjustment of the still pending questions upon satisfactory and honorable terms. The dealings of this Government with other states have been and should always be marked by frankness and sincerity, our purposes avowed, and our methods free from intrigue. This course has borne rich fruit in the past, and it is our duty as a nation to preserve the heritage of good repute which a century of right dealing with foreign Governments has secured to us.

It is a matter of high significance, and no less of congratulation, that the first year of the second century of our constitutional existence finds, as honored guests within our borders, the representatives of all the independent states of North and South America met together in earnest conference touching the best methods of perpetuating and expanding the relations of mutual interest and friendliness existing among them. That the opportunity thus afforded for promoting closer international relations and the increased prosperity of the states represented will be used for the mutual good of all, I can not permit myself to doubt. Our people will await with interest and confidence the results to flow from so auspicious a meeting of allied and, in large part, identical interests.

The recommendations of this international conference of enlightened statesmen will doubtless have the considerate attention of Congress, and its co-operation in the removal of unnecessary barriers to beneficial intercourse between the nations of America. But while the commercial results, which it is hoped will follow this conference, are worthy of pursuit and of the great interest they have excited, it is believed that the crowning benefit will be found in the better securities which may be devised for the maintenance of peace among all American nations and the settlement of all contentions by methods that a Christian civilization can approve. While viewing with interest our national resources and products, the delegates will, I am sure, find a higher satisfaction in the evidences of unselfish friendship which everywhere attend their intercourse with our people.

Another international conference, having great possibilities for good, has lately assembled and is now in session in this Capital. An invitation was extended by the Government, under the act of Congress of July 9, 1888, to all maritime nations to send delegates to confer touching the revision and amendment of the rules and regulations governing vessels at sea and to adopt a uniform system of marine signals. The response to this invitation has been very general and very cordial. Delegates from twenty-six nations are present in the conference, and they have entered upon their useful work with great zeal, and with an evident appreciation of its importance. So far as the agreement to be reached may require legislation to give it effect, the co-operation of Congress is confidently relied upon.

It is an interesting if not indeed an unprecedented fact, that the two International Conferences have brought together here the accredited representatives of thirty-three nations.

Bolivia, Ecuador, and Honduras are now represented by resident envoys of the plenipotentiary grade. All the states of the American system now maintain diplomatic representation at this Capital.

In this connection it may be noted that all the nations of the western hemisphere, with one exception, send to Washington envoys extraordinary and ministers plenipotentiary, being the highest grade accredited to this Government. The United States, on the contrary, sends envoys of lower grade to some of our sister republics. Our representative in Paraguay and Uruguay is a minister resident, while to Bolivia we send a minister resident and consul-general. In view of the importance of our relations with the states

of the American system, our diplomatic agents in those countries should be of the uniform rank of envoy extraordinary and minister plenipotentiary. Certain missions were so elevated by the last Congress with happy effect, and I recommend the completion of the reform thus begun, with the inclusion also of Hawaii and Hayti, in view of their relations to the American system of states.

I also recommend that timely provision be made for extending to Hawaii an invitation to be represented in the International Conference now sitting at this Capital.

Our relations with China have the attentive consideration which their magnitude and interest demand. The failure of the treaty negotiated under the administration of my predecessor for the further and more complete restriction of Chinese labor-immigration, and, with it, the legislation of the last session of Congress dependent thereon, leave some questions open which Congress should now approach in that wise and just spirit which should characterize the relations of two great and friendly powers. While our supreme interests demand the exclusion of a laboring element which experience has shown to be incompatible with our social life, all steps to compass this imperative need should be accompanied with a recognition of the claim of those strangers now lawfully among us to humane and just treatment.

The accession of the young Emperor of China marks, we may hope, an era of progress and prosperity for the great country over which he is called to rule.

The present state of affairs in respect to the Samoan Islands is encouraging. The conference which was held in this city in the summer of 1887 between the representatives of the United States, Germany, and Great Britain having been adjourned because of the persistent divergence of views which was developed in its deliberations, the subsequent course of events in the islands gave rise to questions of a serious character. On the 4th of February last, the German minister at this Capital, in behalf of his Government, proposed a resumption of the conference at Berlin. This proposition was accepted, as Congress, in February last, was informed.

Pursuant to the understanding thus reached, commissioners were appointed by me, by and with the advice and consent of the Senate, who proceeded to Berlin, where the conference was renewed. The deliberations extended through several weeks, and resulted in the conclusion of a treaty which will be submitted to the Senate for its approval. I trust that the efforts which have been made to effect

an adjustment of this question will be productive of the permanent establishment of law and order in Samoa upon the basis of the maintenance of the rights and interests of the natives as well as of the treaty powers.

The questions which have arisen during the past few years between Great Britain and the United States are in abeyance or in course of amicable adjustment.

On the part of the Government of the Dominion of Canada an effort has been apparent during the season just ended to administer the laws and regulations applicable to the fisheries with as little occasion for friction as was possible, and the temperate representations of this Government in respect of cases of undue hardship or of harsh interpretations have been in most cases met with measures of transitory relief. It is trusted that the attainment of our just rights under existing treaties and in virtue of the concurrent legislation of the two contiguous countries will not be long deferred and that all existing causes of difference may be equitably adjusted.

I recommend that provision be made by an international agreement for visibly marking the water boundary between the United States and Canada in the narrow channels that join the Great Lakes. The conventional line therein traced by the Northwestern Boundary Survey, years ago, is not in all cases readily ascertainable for the settlement of jurisdictional questions.

A just and acceptable enlargement of the list of offenses for which extradition may be claimed and granted is most desirable between this country and Great Britain. The territory of neither should become a secure harbor for the evil-doers of the other through any avoidable short-coming in this regard. A new treaty on this subject between the two powers has been recently negotiated and will soon be laid before the Senate.

The importance of the commerce of Cuba and Porto Rico with the United States, their nearest and principal market, justifies the expectation that the existing relations may be beneficially expanded. The impediments resulting from varying dues on navigation and from the vexatious treatment of our vessels, on merely technical grounds of complaint, in West India ports, should be removed.

The progress toward an adjustment of pending claims between the United States and Spain is not as rapid as could be desired.

Questions affecting American interests in connection with railways constructed and operated by our citizens in Peru have claimed the attention of this Government. It is urged that other Governments, in pressing Peru to the payment of their claims, have disregarded the property rights of American citizens. The matter will be carefully investigated, with a view to securing a proper and equitable adjustment.

A similar issue is now pending with Portugal. The Delagoa Bay Railway in Africa was constructed under a concession by Portugal to an American citizen. When nearly completed the road was seized by the agents of the Portuguese Government. Formal protest has been made through our minister at Lisbon against this act, and no proper effort will be spared to secure proper relief.

In pursuance of the charter granted by Congress, and under the terms of its contract with the Government of Nicaragua, the Inter-oceanic Canal Company has begun the construction of the important water-way between the two oceans which its organization contemplates. Grave complications for a time seemed imminent, in view of a supposed conflict of jurisdiction between Nicaragua and Costa Rica in regard to the accessory privileges to be conceded by the latter Republic toward the construction of works on the San Juan River, of which the right bank is Costa Rican territory. I am happy to learn that a friendly arrangement has been effected between the two nations. This Government has held itself ready to promote in every proper way the adjustment of all questions that might present obstacles to the completion of a work of such transcendent importance to the commerce of this country, and indeed to the commercial interests of the world.

The traditional good-feeling between this country and the French Republic has received additional testimony in the participation of our Government and people in the International Exposition held at Paris during the past summer. The success of our exhibitors has been gratifying. The report of the commission will be laid before Congress in due season.

This Government has accepted, under proper reserve as to its policy in foreign territories, the invitation of the Government of Belgium to take part in an International Congress, which opened at Brussels on the 16th of November, for the purpose of devising measures to promote the abolition of the slave-trade in Africa and

to prevent the shipment of slaves by sea. Our interest in the extinction of this crime against humanity, in the regions where it yet survives, has been increased by the results of emancipation within our own borders.

With Germany the most cordial relations continue. The questions arising from the return to the Empire of Germans naturalized in this country are considered and disposed of in a temperate spirit, to the entire satisfaction of both Governments.

It is a source of great satisfaction that the internal disturbances of the Republic of Hayti are at last happily ended, and that an apparently stable government has been constituted. It has been duly recognized by the United States.

A mixed commission is now in session in this Capital for the settlement of long-standing claims against the Republic of Venezuela, and it is hoped that a satisfactory conclusion will be speedily reached. This Government has not hesitated to express its earnest desire that the boundary dispute now pending between Great Britain and Venezuela may be adjusted amicably and in strict accordance with the historic title of the parties.

The advancement of the Empire of Japan has been evidenced by the recent promulgation of a new constitution, containing valuable guaranties of liberty and providing for a responsible ministry to conduct the government.

It is earnestly recommended that our judicial rights and processes in Corea be established on a firm basis, by providing the machinery necessary to carry out treaty stipulations in that regard.

The friendliness of the Persian Government continues to be shown by its generous treatment of Americans engaged in missionary labors, and by the cordial disposition of the Shah to encourage the enterprise of our citizens in the development of Persian resources.

A discussion is in progress touching the jurisdictional treaty rights of the United States in Turkey. An earnest effort will be made to define those rights to the satisfaction of both Governments.

Questions continue to arise in our relations with several countries in respect to the rights of naturalized citizens. Especially is this

the case with France, Italy, Russia, and Turkey, and to a less extent with Switzerland. From time to time earnest efforts have been made to regulate this subject by conventions with those countries. An improper use of naturalization should not be permitted, but it is most important that those who have been duly naturalized should everywhere be accorded recognition of the rights pertaining to the citizenship of the country of their adoption. The appropriateness of special conventions for that purpose is recognized in treaties which this Government has concluded with a number of European states, and it is advisable that the difficulties which now arise in our relations with other countries on the same subject should be similarly adjusted.

The recent revolution in Brazil in favor of the establishment of a republican form of government is an event of great interest to the United States. Our minister at Rio de Janeiro was at once instructed to maintain friendly diplomatic relations with the provisional government, and the Brazilian representatives at this capital were instructed by the provisional government to continue their functions. Our friendly intercourse with Brazil has, therefore, suffered no interruption.

Our minister has been further instructed to extend on the part of this Government a formal and cordial recognition of the new Republic so soon as the majority of the people of Brazil shall have signified their assent to its establishment and maintenance.

Within our own borders a general condition of prosperity prevails. The harvests of the last summer were exceptionally abundant, and the trade conditions now prevailing seem to promise a successful season to the merchant and the manufacturer, and general employment to our working people.

The report of the Secretary of the Treasury for the fiscal year ending June 30, 1889, has been prepared, and will be presented to Congress. It presents with clearness the fiscal operations of the Government, and I avail myself of it to obtain some facts for use here.

The aggregate receipts from all sources for the year were \$387,-050,058.84, derived as follows :

From customs -----	\$223, 832, 741. 69
From internal revenue -----	130, 881, 513. 92
From miscellaneous sources -----	32, 335, 803. 23

The ordinary expenditures for the same period were \$281,996,-615.60, and the total expenditures, including the sinking fund, were \$329,579,929.25. The excess of receipts over expenditures was, after providing for the sinking fund, \$57,470,129.59.

For the current fiscal year the total revenues, actual and estimated, are \$385,000,000, and the ordinary expenditures, actual and estimated, are \$293,000,000, making, with the sinking fund, a total expenditure of \$341,321,116.99, leaving an estimated surplus of \$43,678,883.01.

During the fiscal year there was applied to the purchase of bonds, in addition to those for the sinking fund, \$90,456,172.35, and during the first quarter of the current year the sum of \$37,838,937.77, all of which were credited to the sinking fund. The revenues for the fiscal year ending June 30, 1891, are estimated by the Treasury Department at \$385,000,000, and the expenditures for the same period, including the sinking fund, at \$341,430,477.70. This shows an estimated surplus for that year of \$43,569,522.30, which is more likely to be increased than reduced when the actual transactions are written up.

The existence of so large an actual and anticipated surplus should have the immediate attention of Congress, with a view to reducing the receipts of the Treasury to the needs of the Government as closely as may be. The collection of moneys not needed for public uses imposes an unnecessary burden upon our people, and the presence of so large a surplus in the public vaults is a disturbing element in the conduct of private business. It has called into use expedients for putting it into circulation of very questionable propriety. We should not collect revenue for the purpose of anticipating our bonds, beyond the requirements of the sinking fund, but any unappropriated surplus in the Treasury should be so used, as there is no other lawful way of returning the money to circulation, and the profit realized by the Government offers a substantial advantage.

The loaning of public funds to the banks without interest, upon the security of Government bonds, I regard as an unauthorized and dangerous expedient. It results in a temporary and unnatural increase of the banking capital of favored localities, and compels a cautious and gradual recall of the deposits to avoid injury to the commercial interests. It is not to be expected that the banks having these deposits will sell their bonds to the Treasury so long as the present highly beneficial arrangement is continued. They now practically get interest both upon the bonds and their proceeds. No further use should be made of this method of getting the surplus

into circulation, and the deposits now outstanding should be gradually withdrawn and applied to the purchase of bonds. It is fortunate that such a use can be made of the existing surplus, and for some time to come of any casual surplus that may exist after Congress has taken the necessary steps for a reduction of the revenue. Such legislation should be promptly, but very considerately, enacted.

I recommend a revision of our tariff law, both in its administrative features and in the schedules. The need of the former is generally conceded, and an agreement upon the evils and inconveniences to be remedied and the best methods for their correction will probably not be difficult. Uniformity of valuation at all our ports is essential, and effective measures should be taken to secure it. It is equally desirable that questions affecting rates and classifications should be promptly decided.

The preparation of a new schedule of customs duties is a matter of great delicacy because of its direct effect upon the business of the country, and of great difficulty by reason of the wide divergence of opinion as to the objects that may properly be promoted by such legislation. Some disturbance of business may perhaps result from the consideration of this subject by Congress, but this temporary ill effect will be reduced to the minimum by prompt action and by the assurance which the country already enjoys that any necessary changes will be so made as not to impair the just and reasonable protection of our home industries. The inequalities of the law should be adjusted, but the protective principle should be maintained and fairly applied to the products of our farms as well as of our shops. These duties necessarily have relation to other things besides the public revenues. We can not limit their effects by fixing our eyes on the public treasury alone. They have a direct relation to home production, to work, to wages, and to the commercial independence of our country, and the wise and patriotic legislator should enlarge the field of his vision to include all of these.

The necessary reduction in our public revenues can, I am sure, be made without making the smaller burden more onerous than the larger by reason of the disabilities and limitations which the process of reduction puts upon both capital and labor. The free list can very safely be extended by placing thereon articles that do not offer injurious competition to such domestic products as our home labor can supply. The removal of the internal tax upon tobacco would relieve an important agricultural product from a burden which was imposed only because our revenue from customs duties was insufficient for the public needs. If safe provision against fraud can be

devised the removal of the tax upon spirits used in the arts and in manufactures would also offer an unobjectionable method of reducing the surplus.

A table presented by the Secretary of the Treasury, showing the amount of money of all kinds in circulation each year from 1878 to the present time, is of interest. It appears that the amount of national-bank notes in circulation has decreased during that period \$114,109,729, of which \$37,799,229 is chargeable to the last year. The withdrawal of bank circulation will necessarily continue under existing conditions. It is probable that the adoption of the suggestions made by the Comptroller of the Currency, viz, that the minimum deposit of bonds for the establishment of banks be reduced, and that an issue of notes to the par value of the bonds be allowed, would help to maintain the bank circulation. But, while this withdrawal of bank notes has been going on, there has been a large increase in the amount of gold and silver coin in circulation and in the issues of gold and silver certificates.

The total amount of money of all kinds in circulation on March 1, 1878, was \$805,793,807, while on October 1, 1889, the total was \$1,405,018,000. There was an increase of \$293,417,552 in gold coin, of \$57,554,100 in standard silver dollars, of \$72,311,249 in gold certificates, of \$276,619,715 in silver certificates, and of \$14,073,787 in United States notes, making a total of \$713,976,403. There was during the same period a decrease of \$114,109,729 in bank circulation, and of \$642,481 in subsidiary silver. The net increase was \$599,224,193. The circulation per capita has increased about five dollars during the time covered by the table referred to.

The total coinage of silver dollars was, on November 1, 1889, \$343,638,001, of which \$283,539,521 were in the Treasury vaults and \$60,098,480 were in circulation. Of the amount in the vaults, \$277,319,944 were represented by outstanding silver certificates, leaving \$6,219,577 not in circulation and not represented by certificates.

The law requiring the purchase, by the Treasury, of two million dollars' worth of silver bullion each month, to be coined into silver dollars of four hundred and twelve and one-half grains, has been observed by the Department; but neither the present Secretary nor any of his predecessors has deemed it safe to exercise the discretion given by law to increase the monthly purchases to four million dollars. When the law was enacted (February 28, 1878) the price

of silver in the market was \$1.20 $\frac{4}{10}$ per ounce, making the bullion value of the dollar 93 cents. Since that time the price has fallen as low as 91.2 cents per ounce, reducing the bullion value of the dollar to 70.6 cents. Within the last few months the market price has somewhat advanced, and on the 1st day of November last the bullion value of the silver dollar was 72 cents.

The evil anticipations which have accompanied the coinage and use of the silver dollar have not been realized. As a coin it has not had general use, and the public Treasury has been compelled to store it. But this is manifestly owing to the fact that its paper representative is more convenient. The general acceptance and use of the silver certificate show that silver has not been otherwise discredited. Some favorable conditions have contributed to maintain this practical equality, in their commercial use, between the gold and silver dollars. But some of these are trade conditions that statutory enactments do not control and of the continuance of which we cannot be certain.

I think it is clear that if we should make the coinage of silver at the present ratio free, we must expect that the difference in the bullion values of the gold and silver dollars will be taken account of in commercial transactions, and I fear the same result would follow any considerable increase of the present rate of coinage. Such a result would be discreditable to our financial management and disastrous to all business interests. We should not tread the dangerous edge of such a peril. And, indeed, nothing more harmful could happen to the silver interests. Any safe legislation upon this subject must secure the equality of the two coins in their commercial uses.

I have always been an advocate of the use of silver in our currency. We are large producers of that metal, and should not discredit it. To the plan which will be presented by the Secretary of the Treasury for the issuance of notes or certificates upon the deposit of silver bullion at its market value, I have been able to give only a hasty examination, owing to the press of other matters and to the fact that it has been so recently formulated. The details of such a law require careful consideration, but the general plan suggested by him seems to satisfy the purpose—to continue the use of silver in connection with our currency, and at the same time to obviate the danger of which I have spoken. At a later day I may communicate further with Congress upon this subject.

The enforcement of the Chinese exclusion act has been found to be very difficult on the northwestern frontier. Chinamen, land-

ing at Victoria, find it easy to pass our border, owing to the impossibility, with the force at the command of the customs officers, of guarding so long an inland line. The Secretary of the Treasury has authorized the employment of additional officers who will be assigned to this duty, and every effort will be made to enforce the law. The Dominion exacts a head tax of fifty dollars for each Chinaman landed, and when these persons, in fraud of our law, cross into our territory and are apprehended, our officers do not know what to do with them, as the Dominion authorities will not suffer them to be sent back without a second payment of the tax. An effort will be made to reach an understanding that will remove this difficulty.

The proclamation required by section 3 of the act of March 2, 1889, relating to the killing of seals and other fur-bearing animals, was issued by me on the 21st day of March, and a revenue vessel was dispatched to enforce the laws and protect the interests of the United States. The establishment of a refuge station at Point Barrow, as directed by Congress, was successfully accomplished.

Judged by modern standards, we are practically without coast defenses. Many of the structures we have would enhance rather than diminish the perils of their garrisons if subjected to the fire of improved guns; and very few are so located as to give full effect to the greater range of such guns as we are now making for coast-defense uses. This general subject has had consideration in Congress for some years, and the appropriation for the construction of large rifled guns, made one year ago, was, I am sure, the expression of a purpose to provide suitable works in which these guns might be mounted. An appropriation now made for that purpose would not advance the completion of the works beyond our ability to supply them with fairly effective guns.

The security of our coast cities against foreign attack should not rest altogether in the friendly disposition of other nations. There should be a second line wholly in our own keeping. I very urgently recommend an appropriation at this session for the construction of such works in our most exposed harbors.

I approve the suggestion of the Secretary of War that provision be made for encamping companies of the National Guard in our coast works for a specified time each year, and for their training in the use of heavy guns. His suggestion that an increase of the artillery force of the Army is desirable is also in this connection commended to the consideration of Congress.

The improvement of our important rivers and harbors should be promoted by the necessary appropriations. Care should be taken that the Government is not committed to the prosecution of works not of public and general advantage, and that the relative usefulness of works of that class is not overlooked. So far as this work can ever be said to be completed, I do not doubt that the end would be sooner and more economically reached if fewer separate works were undertaken at the same time, and those selected for their greater general interest were more rapidly pushed to completion. A work once considerably begun should not be subjected to the risks and deterioration which interrupted or insufficient appropriations necessarily occasion.

The assault made by David S. Terry upon the person of Justice Field, of the Supreme Court of the United States, at Lathrop, California, in August last, and the killing of the assailant by a deputy United States marshal who had been deputed to accompany Justice Field and to protect him from anticipated violence at the hands of Terry, in connection with the legal proceedings which have followed, suggest questions which, in my judgment, are worthy of the attention of Congress.

I recommend that more definite provision be made by law, not only for the protection of Federal officers, but for a full trial of such cases in the United States courts. In recommending such legislation I do not at all impeach either the general adequacy of the provision made by the State laws for the protection of all citizens or the general good disposition of those charged with the execution of such laws to give protection to the officers of the United States. The duty of protecting its officers, as such, and of punishing those who assault them on account of their official acts, should not be devolved expressly or by acquiescence upon the local authorities.

Events, which have been brought to my attention, happening in other parts of the country, have also suggested the propriety of extending, by legislation, fuller protection to those who may be called as witnesses in the courts of the United States. The law compels those who are supposed to have knowledge of public offenses to attend upon our courts and grand juries and to give evidence. There is a manifest resulting duty that these witnesses shall be protected from injury on account of their testimony. The investigations of criminal offenses are often rendered futile, and the punishment of crime impossible, by the intimidation of witnesses.

The necessity of providing some more speedy method for disposing of the cases which now come for final adjudication to the Supreme Court becomes every year more apparent and urgent. The plan of providing some intermediate courts, having final appellate jurisdiction of certain classes of questions and cases, has, I think, received a more general approval from the bench and bar of the country than any other. Without attempting to discuss details, I recommend that provision be made for the establishment of such courts.

The salaries of the judges of the district courts in many of the districts are, in my judgment, inadequate. I recommend that all such salaries now below five thousand dollars per annum be increased to that amount. It is quite true that the amount of labor performed by these judges is very unequal, but as they can not properly engage in other pursuits to supplement their incomes, the salary should be such in all cases as to provide an independent and comfortable support.

Earnest attention should be given by Congress to a consideration of the question how far the restraint of those combinations of capital commonly called "trusts" is matter of Federal jurisdiction. When organized, as they often are, to crush out all healthy competition and to monopolize the production or sale of an article of commerce and general necessity, they are dangerous conspiracies against the public good, and should be made the subject of prohibitory and even penal legislation.

The subject of an international copyright has been frequently commended to the attention of Congress by my predecessors. The enactment of such a law would be eminently wise and just.

Our naturalization laws should be so revised as to make the inquiry into the moral character and good disposition towards our Government of the persons applying for citizenship more thorough. This can only be done by taking fuller control of the examination, by fixing the times for hearing such applications, and by requiring the presence of some one who shall represent the Government in the inquiry. Those who are the avowed enemies of social order, or who come to our shores to swell the injurious influence and to extend the evil practices of any association that defies our laws, should not only be denied citizenship but a domicile.

The enactment of a national bankrupt law of a character to be a permanent part of our general legislation is desirable. It should be simple in its methods and inexpensive in its administration.

The report of the Postmaster-General not only exhibits the operations of the Department for the last fiscal year, but contains many valuable suggestions for the improvement and extension of the service, which are commended to your attention. No other branch of the Government has so close a contact with the daily life of the people. Almost every one uses the service it offers, and every hour gained in the transmission of the great commercial mails has an actual and possible value that only those engaged in trade can understand.

The saving of one day in the transmission of the mails between New York and San Francisco, which has recently been accomplished, is an incident worthy of mention.

The plan suggested of a supervision of the post-offices in separate districts that shall involve instruction and suggestion and a rating of the efficiency of the postmasters would, I have no doubt, greatly improve the service.

A pressing necessity exists for the erection of a building for the joint use of the Department and of the city post-office. The Department was partially relieved by renting outside quarters for a part of its force, but it is again overcrowded. The building used by the city office never was fit for the purpose, and is now inadequate and unwholesome.

The unsatisfactory condition of the law relating to the transmission through the mails of lottery advertisements and remittances is clearly stated by the Postmaster-General, and his suggestion as to amendments should have your favorable consideration.

The report of the Secretary of the Navy shows a reorganization of the Bureaus of the Department that will, I do not doubt, promote the efficiency of each.

In general, satisfactory progress has been made in the construction of the new ships of war authorized by Congress. The first vessel of the new Navy, the *Dolphin*, was subjected to very severe trial tests and to very much adverse criticism. But it is gratifying to be able to state that a cruise around the world, from which she has recently returned, has demonstrated that she is a first-class vessel of her rate.

The report of the Secretary shows that while the effective force of the Navy is rapidly increasing, by reason of the improved build and armament of the new ships, the number of our ships fit for sea duty grows very slowly. We had, on the 4th of March last, thirty-seven serviceable ships, and though four have since been added to the list, the total has not been increased, because in the mean time four have been lost or condemned. Twenty-six additional vessels

have been authorized and appropriated for, but it is probable that when they are completed our list will only be increased to forty-two, a gain of five. The old wooden ships are disappearing almost as fast as the new vessels are added. These facts carry their own argument. One of the new ships may, in fighting strength, be equal to two of the old, but it can not do the cruising duty of two. It is important, therefore, that we should have a more rapid increase in the number of serviceable ships. I concur in the recommendation of the Secretary that the construction of eight armored ships, three gun-boats, and five torpedo-boats be authorized.

An appalling calamity befell three of our naval vessels on duty at the Samoan Islands, in the harbor of Apia, in March last, involving the loss of four officers and forty-seven seamen, of two vessels, the *Trenton* and the *Vandalia*, and the disabling of a third, the *Nipsic*. Three vessels of the German Navy, also in the harbor, shared with our ships the force of the hurricane and suffered even more heavily. While mourning the brave officers and men who died, facing with high resolve perils greater than those of battle, it is most gratifying to state that the credit of the American Navy for seamanship, courage, and generosity was magnificently sustained in the storm-beaten harbor of Apia.

The report of the Secretary of the Interior exhibits the transactions of the Government with the Indian tribes. Substantial progress has been made in the education of the children of school age and in the allotment of lands to adult Indians. It is to be regretted that the policy of breaking up the tribal relation and of dealing with the Indian as an individual did not appear earlier in our legislation. Large reservations, held in common, and the maintenance of the authority of the chiefs and head-men have deprived the individual of every incentive to the exercise of thrift, and the annuity has contributed an affirmative impulse towards a state of confirmed pauperism.

Our treaty stipulations should be observed with fidelity, and our legislation should be highly considerate of the best interests of an ignorant and helpless people. The reservations are now generally surrounded by white settlements. We can no longer push the Indian back into the wilderness, and it remains only, by every suitable agency, to push him upward into the estate of a self-supporting and responsible citizen. For the adult, the first step is to locate him upon a farm, and for the child, to place him in a school.

School attendance should be promoted by every moral agency, and those failing, should be compelled. The national schools for Indians have been very successful, and should be multiplied, and, as far as possible, should be so organized and conducted as to facilitate the transfer of the schools to the States or Territories in which they are located, when the Indians in a neighborhood have accepted citizenship, and have become otherwise fitted for such a transfer. This condition of things will be attained slowly, but it will be hastened by keeping it in mind. And in the mean time that co-operation between the Government and the mission schools, which has wrought much good, should be cordially and impartially maintained.

The last Congress enacted two distinct laws relating to negotiations with the Sioux Indians of Dakota for a relinquishment of a portion of their lands to the United States and for dividing the remainder into separate reservations. Both were approved on the same day—March 2. The one submitted to the Indians a specific proposition; the other (section 3 of the Indian appropriation act) authorized the President to appoint three commissioners to negotiate with these Indians for the accomplishment of the same general purpose, and required that any agreements made should be submitted to Congress for ratification.

On the 16th day of April last I appointed Hon. Charles Foster, of Ohio, Hon. William Warner, of Missouri, and Major-General George Crook, of the United States Army, commissioners under the last-named law. They were, however, authorized and directed, first, to submit to the Indians the definite proposition made to them by the act first mentioned, and only in the event of a failure to secure the assent of the requisite number to that proposition to open negotiations for modified terms under the other act. The work of the Commission was prolonged and arduous, but the assent of the requisite number was, it is understood, finally obtained to the proposition made by Congress, though the report of the Commission has not yet been submitted. In view of these facts, I shall not, as at present advised, deem it necessary to submit the agreement to Congress for ratification, but it will in due course be submitted for information. This agreement releases to the United States about nine million acres of land.

The Commission provided for by section 14 of the Indian appropriation bill to negotiate with the Cherokee Indians and all other Indians owning or claiming lands lying west of the ninety-sixth degree of longitude, for the cession to the United States of all such

lands, was constituted by the appointment of Hon. Lucius Fairchild, of Wisconsin, Hon. John F. Hartranft, of Pennsylvania, and Hon. Alfred M. Wilson, of Arkansas, and organized on June 29 last. Their first conference with the representatives of the Cherokees was held at Tahlequah, July 29, with no definite results. General John F. Hartranft, of Pennsylvania, was prevented by ill-health from taking part in the conference. His death, which occurred recently, is justly and generally lamented by a people he had served with conspicuous gallantry in war and with great fidelity in peace. The vacancy thus created was filled by the appointment of Hon. Warren G. Sayre, of Indiana.

A second conference between the Commission and the Cherokees was begun November 6, but no results have yet been obtained, nor is it believed that a conclusion can be immediately expected. The cattle syndicate now occupying the lands for grazing purposes is clearly one of the agencies responsible for the obstruction of our negotiations with the Cherokees. The large body of agricultural lands constituting what is known as the "Cherokee Outlet" ought not to be, and indeed can not long be, held for grazing, and for the advantage of a few against the public interests and the best advantage of the Indians themselves. The United States has now under the treaties certain rights in these lands. These will not be used oppressively, but it can not be allowed that those who by sufferance occupy these lands shall interpose to defeat the wise and beneficent purposes of the Government. I can not but believe that the advantageous character of the offer made by the United States to the Cherokee Nation, for a full release of these lands, as compared with other suggestions now made to them, will yet obtain for it a favorable consideration.

Under the agreement made between the United States and the Muscogee (or Creek) Nation of Indians on the 19th day of January, 1889, an absolute title was secured by the United States to about three and a half millions of acres of land. Section 12 of the general Indian appropriation act, approved March 2, 1889, made provision for the purchase by the United States from the Seminole tribe of a certain portion of their lands. The delegates of the Seminole Nation, having first duly evidenced to me their power to act in that behalf, delivered a proper release and conveyance to the United States of all the lands mentioned in the act, which was accepted by me and certified to be in compliance with the statute.

By the terms of both the acts referred to all the lands so purchased were declared to be a part of the public domain, and open to settle-

ment under the homestead law. But of the lands embraced in these purchases, being in the aggregate about five and a half million acres, three and a half million acres had already, under the terms of the treaty of 1866, been acquired by the United States for the purpose of settling other Indian tribes thereon, and had been appropriated to that purpose. The land remaining and available for settlement consisted of 1,887,796 acres, surrounded on all sides by lands in the occupancy of Indian tribes. Congress had provided no civil government for the people who were to be invited by my proclamation to settle upon these lands, except as the new court, which had been established at Muscogee, or the United States courts in some of the adjoining States, had power to enforce the general laws of the United States.

In this condition of things I was quite reluctant to open the lands to settlement. But in view of the fact that several thousand persons, many of them with their families, had gathered upon the borders of the Indian Territory, with a view to securing homesteads on the ceded lands, and that delay would involve them in much loss and suffering, I did, on the 23d day of March last, issue a proclamation declaring that the lands therein described would be open to settlement under the provisions of the law on the 22d day of April following, at 12 o'clock noon. Two land districts had been established and the offices were open for the transaction of business when the appointed time arrived.

It is much to the credit of the settlers that they very generally observed the limitation as to the time when they might enter the Territory. Care will be taken that those who entered in violation of the law do not secure the advantage they unfairly sought. There was a good deal of apprehension that the strife for locations would result in much violence and bloodshed, but happily these anticipations were not realized. It is estimated that there are now in the Territory about sixty thousand people; and several considerable towns have sprung up, for which temporary municipal governments have been organized. Guthrie is said to have now a population of almost eight thousand. Eleven schools and nine churches have been established, and three daily and five weekly newspapers are published in this city, whose charter and ordinances have only the sanction of the voluntary acquiescence of the people from day to day.

Oklahoma City has a population of about five thousand, and is proportionately as well provided as Guthrie with churches, schools, and newspapers. Other towns and villages having populations of from one hundred to a thousand are scattered over the Territory.

In order to secure the peace of this new community, in the absence of civil government, I directed General Merritt, commanding the Department of the Missouri, to act in conjunction with the marshals of the United States to preserve the peace, and upon their requisition to use the troops to aid them in executing warrants and in quieting any riots or breaches of the peace that might occur. He was further directed to use his influence to promote good order and to avoid any conflicts between or with the settlers. Believing that the introduction and sale of liquors, where no legal restraints or regulations existed, would endanger the public peace, and in view of the fact that such liquors must first be introduced into the Indian reservations before reaching the white settlements, I further directed the general commanding to enforce the laws relating to the introduction of ardent spirits into the Indian country.

The presence of the troops has given a sense of security to the well-disposed citizens, and has tended to restrain the lawless. In one instance the officer in immediate command of the troops went further than I deemed justifiable in supporting the *de facto* municipal government of Guthrie, and he was so informed and directed to limit the interference of the military to the support of the marshals on the lines indicated in the original order. I very urgently recommend that Congress at once provide a Territorial government for these people. Serious questions, which may at any time lead to violent outbreaks, are awaiting the institution of courts for their peaceful adjustment. The American genius for self-government has been well illustrated in Oklahoma, but it is neither safe nor wise to leave these people longer to the expedients which have temporarily served them.

Provision should be made for the acquisition of title to town lots in the towns now established in Alaska, for locating town sites and for the establishment of municipal governments. Only the mining laws have been extended to that Territory, and no other form of title to lands can now be obtained. The general land laws were framed with reference to the disposition of agricultural lands, and it is doubtful if their operation in Alaska would be beneficial.

We have fortunately not extended to Alaska the mistaken policy of establishing reservations for the Indian tribes, and can deal with them from the beginning as individuals with, I am sure, better results. But any disposition of the public lands and any regulations relating to timber and to the fisheries should have a kindly regard to their interests. Having no power to levy taxes, the people of Alaska are wholly dependent upon the General Government, to

whose revenues the seal fisheries make a large annual contribution. An appropriation for education should neither be overlooked nor stinted.

The smallness of the population and the great distances between the settlements offer serious obstacles to the establishment of the usual Territorial form of government. Perhaps the organization of several subdistricts, with a small municipal council of limited powers for each, would be safe and useful.

Attention is called in this connection to the suggestions of the Secretary of the Treasury relating to the establishment of another port of entry in Alaska, and of other needed customs facilities and regulations.

In the administration of the land laws the policy of facilitating, in every proper way, the adjustment of the honest claims of individual settlers upon the public lands has been pursued. The number of pending cases had, during the preceding administration, been greatly increased under the operation of orders for a time suspending final action in a large part of the cases originating in the West and Northwest, and by the subsequent use of unusual methods of examination. Only those who are familiar with the conditions under which our agricultural lands have been settled can appreciate the serious and often fatal consequences to the settler of a policy that puts his title under suspicion, or delays the issuance of his patent. While care is taken to prevent and to expose fraud, it should not be imputed without reason.

The manifest purpose of the homestead and pre-emption laws was to promote the settlement of the public domain by persons having a bona-fide intent to make a home upon the selected lands. Where this intent is well established and the requirements of the law have been substantially complied with, the claimant is entitled to a prompt and friendly consideration of his case. But where there is reason to believe that the claimant is the mere agent of another, who is seeking to evade a law intended to promote small holdings, and to secure by fraudulent methods large tracts of timber and other lands, both principal and agent should not only be thwarted in their fraudulent purpose, but should be made to feel the full penalties of our criminal statutes. The laws should be so administered as not to confound these two classes, and to visit penalties only upon the latter.

The unsettled state of the titles to large bodies of lands in the Territories of New Mexico and Arizona has greatly retarded the development of those Territories. Provision should be made by

law for the prompt trial and final adjustment, before a judicial tribunal or commission, of all claims based upon Mexican grants. It is not just to an intelligent and enterprising people that their peace should be disturbed and their prosperity retarded by these old contentions. I express the hope that differences of opinion as to methods may yield to the urgency of the case.

The law now provides a pension for every soldier and sailor who was mustered into the service of the United States during the civil war and is now suffering from wounds or disease having an origin in the service and in the line of duty. Two of the three necessary facts, viz, muster and disability, are usually susceptible of easy proof; but the third, origin in the service, is often difficult, and in many deserving cases impossible to establish. That very many of those who endured the hardships of our most bloody and arduous campaigns are now disabled from diseases that had a real but not traceable origin in the service I do not doubt. Besides these there is another class composed of men many of whom served an enlistment of three full years, and of re-enlisted veterans who added a fourth year of service, who escaped the casualties of battle and the assaults of disease, who were always ready for any detail, who were in every battle line of their command, and were mustered out in sound health, and have, since the close of the war, while fighting with the same indomitable and independent spirit the contests of civil life, been overcome by disease or casualty.

I am not unaware that the pension-roll already involves a very large annual expenditure, neither am I deterred by that fact from recommending that Congress grant a pension to such honorably discharged soldiers and sailors of the civil war as having rendered substantial service during the war are now dependent upon their own labor for a maintenance, and by disease or casualty are incapacitated from earning it. Many of the men who would be included in this form of relief are now dependent upon public aid, and it does not, in my judgment, consist with the national honor that they shall continue to subsist upon the local relief given indiscriminately to paupers instead of upon the special and generous provision of the nation they served so gallantly and unselfishly. Our people will, I am sure, very generally approve such legislation. And I am equally sure that the survivors of the Union Army and Navy will feel a grateful sense of relief when this worthy and suffering class of their comrades is fairly cared for.

There are some manifest inequalities in the existing law that should be remedied. To some of these the Secretary of the Interior has called attention.

It is gratifying to be able to state that by the adoption of new and better methods in the War Department the calls of the Pension Office for information as to the military and hospital records of pension claimants are now promptly answered, and the injurious and vexatious delays that have heretofore occurred are entirely avoided. This will greatly facilitate the adjustment of all pending claims.

The advent of four new States, South Dakota, North Dakota, Montana, and Washington, into the Union under the Constitution, in the same month, and the admission of their duly chosen representatives to our National Congress at the same session, is an event as unexampled as it is interesting.

The certification of the votes cast and of the constitutions adopted in each of the States was filed with me as required by the eighth section of the act of February 22, 1889, by the governors of said Territories respectively. Having, after a careful examination, found that the several constitutions and governments were republican in form and not repugnant to the Constitution of the United States, that all the provisions of the act of Congress had been complied with, and that a majority of the votes cast in each of said proposed States was in favor of the adoption of the constitution submitted therein, I did so declare by a separate proclamation as to each ; as to North Dakota and South Dakota on Saturday, November 2 ; as to Montana on Friday, November 8, and as to Washington on Monday, November 11.

Each of these States has within it resources the development of which will employ the energies of, and yield a comfortable subsistence to, a great population. The smallest of these new States, Washington, stands twelfth, and the largest, Montana, third, among the forty-two in area. The people of these States are already well trained, intelligent, and patriotic American citizens, having common interests and sympathies with those of the older States, and a common purpose to defend the integrity and uphold the honor of the nation.

The attention of the Interstate Commerce Commission has been called to the urgent need of Congressional legislation for the better protection of the lives and limbs of those engaged in operating the great interstate freight lines of the country, and especially of the yard-men and brakemen. A petition, signed by nearly ten thousand railway brakemen, was presented to the Commission, asking that steps might be taken to bring about the use of automatic brakes and couplers on freight cars.

At a meeting of State railroad commissioners and their accredited representatives, held at Washington in March last, upon the invitation of the Interstate Commerce Commission, a resolution was unanimously adopted, urging the Commission "to consider what can be done to prevent the loss of life and limb in coupling and uncoupling freight cars, and in handling the brakes of such cars." During the year ending June 30, 1888, over 2,000 railroad employes were killed in service, and more than 20,000 injured. It is competent, I think, for Congress to require uniformity in the construction of cars used in interstate commerce, and the use of improved safety appliances upon such trains. Time will be necessary to make the needed changes, but an earnest and intelligent beginning should be made at once. It is a reproach to our civilization that any class of American workmen should, in the pursuit of a necessary and useful vocation, be subjected to a peril of life and limb as great as that of a soldier in time of war.

The creation of an Executive Department, to be known as the Department of Agriculture, by the act of February 9, last, was a wise and timely response to a request which had long been respectfully urged by the farmers of the country. But much remains to be done to perfect the organization of the Department so that it may fairly realize the expectations which its creation excited. In this connection attention is called to the suggestions contained in the report of the Secretary, which is herewith submitted. The need of a law officer for the Department, such as is provided for the other Executive Departments, is manifest. The failure of the last Congress to make the usual provision for the publication of the annual report should be promptly remedied. The public interest in the report and its value to the farming community I am sure will not be diminished under the new organization of the Department.

I recommend that the Weather Service be separated from the War Department and established as a Bureau in the Department of Agriculture. This will involve an entire reorganization both of the Weather Bureau and of the Signal Corps, making of the first a purely civil organization and of the other a purely military staff corps. The report of the Chief Signal Officer shows that the work of the corps on its military side has been deteriorating.

The interests of the people of the District of Columbia should not be lost sight of in the pressure for consideration of measures affecting the whole country. Having no legislature of its own, either

municipal or general, its people must look to Congress for the regulation of all those concerns that, in the States, are the subject of local control. Our whole people have an interest that the National Capital should be made attractive and beautiful, and above all that its repute for social order should be well maintained. The laws regulating the sale of intoxicating drinks in the District should be revised with a view to bringing the traffic under stringent limitations and control.

In execution of the power conferred upon me by the act making appropriations for the expenses of the District of Columbia for the year ending June 30, 1890, I did, on the 17th day of August last, appoint Rudolph Hering, of New York, Samuel M. Gray, of Rhode Island, and Frederick P. Stearns, of Massachusetts, three eminent sanitary engineers, to examine and report upon the system of sewerage existing in the District of Columbia. Their report, which is not yet completed, will be in due course submitted to Congress.

The report of the Commissioners of the District is herewith transmitted, and the attention of Congress is called to the suggestions contained therein.

The proposition to observe the four hundredth anniversary of the discovery of America by the opening of a world's fair or exposition in some one of our great cities will be presented for the consideration of Congress. The value and interest of such an exposition may well claim the promotion of the General Government.

On the 4th of March last the Civil Service Commission had but a single member. The vacancies were filled on the 7th day of May, and since then the commissioners have been industriously, though with an inadequate force, engaged in executing the law. They were assured by me that a cordial support would be given them in the faithful and impartial enforcement of the statute and of the rules and regulations adopted in aid of it.

Heretofore the book of eligibles has been closed to every one, except as certifications were made upon the requisition of the appointing-officers. This secrecy was the source of much suspicion, and of many charges of favoritism in the administration of the law. What is secret is always suspected; what is open can be judged. The Commission, with the full approval of all its members, has now opened the list of eligibles to the public. The eligible lists for the classified post-offices and custom-houses are now publicly posted in the respective offices, as are also the certifications for appointments. The purpose of the civil-service law was absolutely to exclude any other

consideration in connection with appointments under it than that of merit as tested by the examinations. The business proceeds upon the theory that both the examining boards and the appointing-officers are absolutely ignorant as to the political views and associations of all persons on the civil-service lists. It is not too much to say, however, that some recent Congressional investigations have somewhat shaken public confidence in the impartiality of the selections for appointment.

The reform of the civil service will make no safe or satisfactory advance until the present law and its equal administration are well established in the confidence of the people. It will be my pleasure, as it is my duty, to see that the law is executed with firmness and impartiality. If some of its provisions have been fraudulently evaded by appointing-officers, our resentment should not suggest the repeal of the law, but reform in its administration. We should have one view of the matter, and hold it with a sincerity that is not affected by the consideration that the party to which we belong is for the time in power.

My predecessor, on the 4th day of January, 1889, by an executive order to take effect March 15, brought the Railway Mail Service under the operation of the civil-service law. Provision was made that the order should take effect sooner in any State where an eligible list was sooner obtained. On the 11th day of March, Mr. Lyman, then the only member of the Commission, reported to me in writing that it would not be possible to have the list of eligibles ready before May 1, and requested that the taking effect of the order be postponed until that time, which was done, subject to the same provision contained in the original order as to States in which an eligible list was sooner obtained.

As a result of the revision of the rules, of the new classification, and of the inclusion of the Railway Mail Service, the work of the Commission has been greatly increased, and the present clerical force is found to be inadequate. I recommend that the additional clerks asked by the Commission be appropriated for.

The duty of appointment is devolved by the Constitution or by the law, and the appointing-officers are properly held to a high responsibility in its exercise. The growth of the country and the consequent increase of the civil list have magnified this function of the Executive disproportionately. It can not be denied, however, that the labor connected with this necessary work is increased, often to the point of actual distress, by the sudden and excessive demands that are made upon an incoming administration for removals and appointments. But, on the other hand, it is not true that incum-

bency is a conclusive argument for a continuance in office. Impartiality, moderation, fidelity to public duty, and a good attainment in the discharge of it must be added before the argument is complete. When those holding administrative offices so conduct themselves as to convince just political opponents that no party consideration or bias affects in any way the discharge of their public duties, we can more easily stay the demand for removals.

I am satisfied that both in and out of the classified service great benefit would accrue from the adoption of some system by which the officer would receive the distinction and benefit that, in all private employments, comes from exceptional faithfulness and efficiency in the performance of duty.

I have suggested to the heads of the Executive Departments that they consider whether a record might not be kept in each Bureau of all those elements that are covered by the terms "faithfulness" and "efficiency," and a rating made showing the relative merits of the clerks of each class, this rating to be regarded as a test of merit in making promotions.

I have also suggested to the Postmaster-General that he adopt some plan by which he can, upon the basis of the reports to the Department and of frequent inspections, indicate the relative merit of postmasters of each class. They will be appropriately indicated in the official register and in the report of the Department. That a great stimulus would thus be given to the whole service I do not doubt, and such a record would be the best defense against inconsiderate removals from office.

The interest of the General Government in the education of the people found an early expression, not only in the thoughtful and sometimes warning utterances of our ablest statesmen, but in liberal appropriations from the common resources for the support of education in the new States. No one will deny that it is of the gravest national concern that those who hold the ultimate control of all public affairs should have the necessary intelligence wisely to direct and determine them. National aid to education has heretofore taken the form of land grants, and in that form the constitutional power of Congress to promote the education of the people is not seriously questioned. I do not think it can be successfully questioned when the form is changed to that of a direct grant of money from the public treasury.

Such aid should be, as it always has been, suggested by some exceptional conditions. The sudden emancipation of the slaves of the South, the bestowal of the suffrage, which soon followed, and the

impairment of the ability of the States where these new citizens were chiefly found to adequately provide educational facilities, presented not only exceptional but unexampled conditions. That the situation has been much ameliorated there is no doubt. The ability and interest of the States have happily increased.

But a great work remains to be done, and I think the General Government should lend its aid. As the suggestion of a national grant in aid of education grows chiefly out of the condition and needs of the emancipated slave and his descendants, the relief should, as far as possible, while necessarily proceeding upon some general lines, be applied to the need that suggested it. It is essential, if much good is to be accomplished, that the sympathy and active interest of the people of the States should be enlisted, and that the methods adopted should be such as to stimulate and not to supplant local taxation for school purposes.

As one Congress can not bind a succeeding one in such a case, and as the effort must, in some degree, be experimental, I recommend that any appropriation made for this purpose be so limited in annual amount and as to the time over which it is to extend as will, on the one hand, give the local school authorities opportunity to make the best use of the first year's allowance, and on the other deliver them from the temptation to unduly postpone the assumption of the whole burden themselves.

The colored people did not intrude themselves upon us; they were brought here in chains and held in the communities where they are now chiefly found, by a cruel slave code. Happily for both races they are now free. They have, from a stand-point of ignorance and poverty, which was our shame, not theirs, made remarkable advances in education and in the acquisition of property. They have, as a people, shown themselves to be friendly and faithful towards the white race, under temptations of tremendous strength. They have their representatives in the national cemeteries where a grateful Government has gathered the ashes of those who died in its defense. They have furnished to our regular Army regiments that have won high praise from their commanding officers for courage and soldierly qualities, and for fidelity to the enlistment oath. In civil life they are now the toilers of their communities, making their full contribution to the widening streams of prosperity which these communities are receiving. Their sudden withdrawal would stop production and bring disorder into the household as well as the shop. Generally they do not desire to quit their homes, and their employers resent the interference of the emigration agents who seek to stimulate such a desire.

But, notwithstanding all this, in many parts of our country where the colored population is large the people of that race are, by various devices, deprived of any effective exercise of their political rights and of many of their civil rights. The wrong does not expend itself upon those whose votes are suppressed. Every constituency in the Union is wronged.

It has been the hope of every patriot that a sense of justice and of respect for the law would work a gradual cure of these flagrant evils. Surely, no one supposes that the present can be accepted as a permanent condition. If it is said that these communities must work out this problem for themselves, we have a right to ask whether they are at work upon it. Do they suggest any solution? When and under what conditions is the black man to have a free ballot? When is he in fact to have those full civil rights which have so long been his in law? When is that equality of influence which our form of government was intended to secure to the electors to be restored? This generation should courageously face these grave questions, and not leave them as a heritage of woe to the next. The consultation should proceed with candor, calmness, and great patience; upon the lines of justice and humanity, not of prejudice and cruelty. No question in our country can be at rest except upon the firm base of justice and of the law.

I earnestly invoke the attention of Congress to the consideration of such measures within its well-defined constitutional powers as will secure to all our people a free exercise of the right of suffrage and every other civil right under the Constitution and laws of the United States. No evil, however deplorable, can justify the assumption, either on the part of the Executive or of Congress, of powers not granted; but both will be highly blamable if all the powers granted are not wisely but firmly used to correct these evils. The power to take the whole direction and control of the election of members of the House of Representatives is clearly given to the General Government. A partial and qualified supervision of these elections is now provided for by law, and in my opinion this law may be so strengthened and extended as to secure, on the whole, better results than can be attained by a law taking all the processes of such election into Federal control. The colored man should be protected in all of his relations to the Federal Government, whether as litigant, juror, or witness in our courts, as an elector for members of Congress, or as a peaceful traveler upon our interstate railways.

There is nothing more justly humiliating to the national pride, and nothing more hurtful to the national prosperity than the infe-

riority of our merchant marine compared with that of other nations whose general resources, wealth, and sea-coast lines do not suggest any reason for their supremacy on the sea. It was not always so, and our people are agreed, I think, that it shall not continue to be so. It is not possible in this communication to discuss the causes of the decay of our shipping interests or the differing methods by which it is proposed to restore them. The statement of a few well-authenticated facts and some general suggestions as to legislation is all that is practicable. That the great steam-ship lines sailing under the flags of England, France, Germany, Spain, and Italy, and engaged in foreign commerce, were promoted, and have since been and now are liberally aided, by grants of public money, in one form or another, is generally known. That the American lines of steam-ships have been abandoned by us to an unequal contest with the aided lines of other nations until they have been withdrawn, or, in the few cases where they are still maintained, are subject to serious disadvantages, is matter of common knowledge.

The present situation is such that travelers and merchandise find Liverpool often a necessary intermediate port between New York and some of the South American capitals. The fact that some of the delegates from South American states to the Conference of American Nations, now in session at Washington, reached our shores by reversing that line of travel, is very conclusive of the need of such a conference, and very suggestive as to the first and most necessary step in the direction of fuller and more beneficial intercourse with nations that are now our neighbors upon the lines of latitude, but not upon the lines of established commercial intercourse.

I recommend that such appropriations be made for ocean-mail service, in American steam-ships, between our ports and those of Central and South America, China, Japan, and the important islands in both of the great oceans, as will be liberally remunerative for the service rendered, and as will encourage the establishment and in some fair degree equalize the chances of American steam-ship lines in the competitions which they must meet. That the American states lying south of us will cordially co-operate in establishing and maintaining such lines of steam-ships to their principal ports I do not doubt.

We should also make provision for a naval reserve to consist of such merchant ships, of American construction and of a specified tonnage and speed, as the owners will consent to place at the use of the Government, in case of need, as armed cruisers. England has adopted this policy, and as a result can now, upon necessity, at once

place upon her naval list some of the fastest steam-ships in the world. A proper supervision of the construction of such vessels would make their conversion into effective ships of war very easy..

I am an advocate of economy in our national expenditures, but it is a misuse of terms to make this word describe a policy that withholds an expenditure for the purpose of extending our foreign commerce. The enlargement and improvement of our merchant marine, the development of a sufficient body of trained American seamen, the promotion of rapid and regular mail communication between the ports of other countries and our own, and the adaptation of large and swift American merchant steam-ships to naval uses, in time of war, are public purposes of the highest concern. The enlarged participation of our people in the carrying trade, the new and increased markets that will be opened for the products of our farms and factories, and the fuller and better employment of our mechanics, which will result from a liberal promotion of our foreign commerce, insure the widest possible diffusion of benefit to all the States and to all our people. Everything is most propitious for the present inauguration of a liberal and progressive policy upon this subject, and we should enter upon it with promptness and decision.

The legislation which I have suggested, it is sincerely believed, will promote the peace and honor of our country and the prosperity and security of the people. I invoke the diligent and serious attention of Congress to the consideration of these and such other measures as may be presented, having the same great end in view.

BENJ. HARRISON.

EXECUTIVE MANSION,

Washington, December 3, 1889.

Ab 89—3

REPORT OF THE SECRETARY OF THE TREASURY.

TREASURY DEPARTMENT,
Washington, D. C., December 2, 1889.

SIR: I have the honor to submit the following report:

RECEIPTS AND EXPENDITURES.

Fiscal year 1889.

The ordinary revenues of the Government from all sources for the fiscal year ended June 30, 1889, were:

From customs.....	\$223,832,741 69
From internal revenue.....	130,881,513 92
From profits on coinage, bullion deposits, and assays.....	10,165,264 79
From sales of public lands.....	8,038,651 79
From fees—consular, letters-patent, and land.....	3,378,063 59
From tax on national banks.....	1,536,087 16
From sinking-fund for Pacific railways.....	1,321,124 53
From customs fees, fines, penalties, and forfeitures.....	1,113,020 78
From repayment of interest by Pacific railways.....	603,764 72
From Soldiers' Home, permanent fund.....	592,427 25
From sales of Indian lands.....	446,258 19
From tax on seal-skins.....	317,500 00
From sales of Government property.....	295,530 42
From immigrant fund.....	236,196 50
From deposits for surveying public lands.....	95,818 63
From depredations on public lands.....	65,434 29
From sale of condemned naval vessels.....	22,582 75
From revenues of the District of Columbia.....	2,523,950 69
From miscellaneous sources.....	1,584,127 15
Total ordinary receipts.....	387,050,058 84

The ordinary expenditures for the same period were:

For civil expenses.....	\$25,566,131 05
For foreign intercourse.....	1,897,625 72
For Indian service.....	6,892,207 78
For pensions.....	87,624,779 11
For the military establishment, including rivers and harbors and arsenals.....	44,435,270 85
For the naval establishment, including vessels, machinery, and improvements at navy-yards.....	21,378,809 31
For miscellaneous expenditures, including public buildings, light-houses, and collecting the revenues.....	47,951,637 57

For expenditures on account of the District of Columbia.....	\$5,248,069 92
For interest on the public debt.....	41,001,484 29
Total ordinary expenditures.....	281,996,615 60
Leaving a surplus of.....	105,053,443 24
Of which there was used in the redemption of notes and fractional currency, and purchase of bonds for the sinking fund, the sum of..	47,583,313 65
Leaving a net surplus for the year of.....	57,470,129 59

In his last annual report to Congress my predecessor in office estimated that the revenues of the Government for the fiscal year to end June 30, 1889, would exceed ordinary expenditures, not including the sinking-fund, by \$104,000,000. The accuracy of his forecast is demonstrated by the results set forth in the foregoing tables.

As compared with the fiscal year 1888, the receipts for 1889 have increased \$7,783,984.08, as follows :

Source.	Increase.	Decrease.	Net increase.
Internal revenue.....	\$6,584,641 94		
Customs.....	4,741,568 06		
Profits on coinage, assays, etc.....	777,630 31		
Consular fees.....	214,797 75		
Soldiers' Home, permanent fund.....	159,237 96		
Sinking-fund for Pacific railways.....	150,793 10		
Customs emolument fees.....	78,558 48		
Sales of public lands.....		\$3,163,305 44	
Sales of Indian lands.....		483,828 24	
Registers' and receivers' fees.....		248,543 99	
Tax on national banks.....		212,479 69	
Revenues of the District of Columbia.....		126,399 62	
Sale of condemned naval vessels.....		83,083 13	
Repayment of interest by Pacific railways.....		77,932 23	
Sales of Government property.....		70,346 84	
Deposits for surveying public lands.....		66,072 13	
Immigrant fund.....		54,993 00	
Customs fines, penalties, and forfeitures.....		50,992 71	
Fees on letters-patent.....		21,639 16	
Custom-house fees.....		11,993 19	
Miscellaneous items.....		301,573 15	
Total.....	12,707,227 60	4,923,243 52	\$7,783,984 08

There was an increase in the ordinary expenditures of \$22,342,656.93, as follows :

	Increase.	Decrease.	Net increase.
Civil and miscellaneous.....	\$7,711,803 46		
Pensions.....	7,336,270 34		
War Department.....	5,612,884 74		
Navy Department.....	4,452,371 06		
Indians.....	642,800 61		
Interest on the public debt.....		\$3,713,523 18	
Total.....	25,056,180 11	3,713,523 18	\$22,342,656 93

Fiscal year 1890.

For the present fiscal year the revenues, actual and estimated, are as follows:

Source.	Quarter ended September 30, 1889.	Remaining three-fourths of the year.	Total.
	<i>Actual.</i>	<i>Estimated.</i>	
Customs	\$58,274,697 04	\$161,725,302 96	\$220,000,000 00
Internal revenue	34,783,244 96	100,266,755 04	135,000,000 00
Sales of public lands	1,957,706 51	5,042,293 49	7,000,000 00
Profits on coinage, assays, etc	1,473,940 83	7,026,059 17	8,500,000 00
Tax on national banks	661,392 98	838,607 02	1,500,000 00
Fees—consular, letters-patent, and land	873,920 46	2,126,079 54	3,000,000 00
Interest and sinking-fund, Pacific railways ..	645,876 19	1,351,123 81	2,000,000 00
Customs fees, fines, penalties, etc	292,323 39	707,676 61	1,000,000 00
Sales of Government property	40,070 41	209,929 59	250,000 00
Deposits for surveying public lands	33,411 13	216,588 87	250,000 00
Revenues of the District of Columbia ..	205,145 61	2,204,834 39	2,500,000 00
Miscellaneous	811,599 17	3,188,400 83	4,000,000 00
Total ordinary receipts	100,093,328 68	284,906,671 32	385,000,000 00

The expenditures for the same period, actual and estimated, are as follows:

Object.	Quarter ended September 30, 1889.	Remaining three-fourths of the year.	Total.
	<i>Actual.</i>	<i>Estimated.</i>	
Civil and miscellaneous, including public buildings, light-houses, and collecting the revenue	\$19,593,943 32	\$50,406,056 68	\$70,000,000 00
Indians	2,024,876 03	4,975,123 97	7,000,000 00
Pensions	35,487,627 37	68,512,372 63	104,000,000 00
Military establishment, including fortifications, river and harbor improvements, and arsenals	14,762,047 51	33,237,952 49	48,000,000 00
Naval establishment, including vessels and machinery, and improvements at navy-yards	5,476,675 92	17,523,324 08	23,000,000 00
Expenditures for District of Columbia	1,849,727 00	3,150,273 00	5,000,000 00
Interest on the public debt	10,293,437 17	25,706,542 83	36,000,000 00
Total ordinary expenditures	89,488,354 32	203,511,645 68	293,000,000 00

Total receipts, actual and estimated	\$385,000,000 00
Total expenditures, actual and estimated	293,000,000 00

Estimated surplus, applicable to the purchase of bonds	92,000,000 00
Estimated amount required for the sinking-fund	48,321,116 99

Leaving a net surplus for the year of	43,678,883 01
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Fiscal year 1891.

The revenues of the Government for the fiscal year ending June 30, 1891, are thus estimated upon the basis of existing laws:

From customs	\$220,000,000 00
From internal revenue	135,000,000 00
From sales of public lands	7,000,000 00

From profits on coinage, assays, etc.....	\$8, 500, 000 00
From fees—consular, letters-patent, and land.....	3, 000, 000 00
From interest and sinking-fund, Pacific railways.....	2, 000, 000 00
From tax on national banks.....	1, 500, 000 00
From customs fees, fines, penalties, etc.....	1, 000, 000 00
From sales of Government property.....	250, 000 00
From deposits for surveying public lands.....	250, 000 00
From revenues of the District of Columbia.....	2, 500, 000 00
From miscellaneous sources.....	4, 000, 000 00

Total estimated receipts.....	385, 000, 000 00
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The estimates of expenditures for the same period, as submitted by the several Executive Departments and offices, are as follows:

Legislative establishment.....	\$3, 399, 152 15
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Executive establishment—

Executive proper.....	\$153, 644 00
State Department.....	150, 150 00
Treasury Department.....	8, 790, 274 55
War Department.....	2, 188, 750 00
Navy Department.....	450, 906 00
Interior Department.....	4, 791, 794 00
Post-Office Department.....	898, 770 00
Department of Agriculture.....	1, 208, 430 00
Department of Labor.....	158, 410 00
Department of Justice.....	190, 650 00

18, 981, 778 55

Judicial establishment.....	454, 750 00
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Foreign intercourse.....	1, 807, 285 00
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Military establishment.....	25, 403, 148 86
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Naval establishment.....	24, 290, 498 79
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Indian affairs.....	5, 804, 399 77
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Pensions.....	98, 587, 252 00
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Public Works—

Legislative.....	8, 900 00
Treasury Department.....	5, 453, 453 00
War Department.....	12, 020, 134 74
Navy Department.....	1, 308, 755 00
Interior Department.....	212, 400 00
Department of Justice.....	3, 800 00

19, 007, 442 74

Postal service.....	7, 020, 361 65
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Miscellaneous—

Legislative.....	3, 021, 531 12
Treasury Department.....	10, 542, 694 45
War Department.....	5, 551, 040 35
Interior Department.....	6, 650, 575 00
Department of Justice.....	3, 900 000 00
District of Columbia.....	5, 380, 114 27

35, 045, 955 19

Permanent annual appropriations—

Interest on the public debt.....	31, 500, 000 00
Refunding—customs, internal revenue, lands, etc.....	10, 393, 680 00
Collecting revenue from customs.....	5, 500, 000 00
Miscellaneous.....	5, 075, 700 00

52, 469, 380 00

Total estimated expenditures, excluding sinking-fund.....	292, 271, 404 70
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Or an estimated surplus of.....	92, 728, 595 30
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Estimated amount required for the sinking-fund.....	49, 159, 073 00
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Leaving a net surplus for the year of.....	43, 569, 522 30
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The net surplus for the fiscal year 1889, together with \$5,940 received for four per cent. bonds issued for interest accrued on refunding certificates converted during the year, and \$33,503,357.76 taken from the cash balance in the Treasury at the beginning of the year, making altogether \$90,979,427.35, was applied to the purchase and redemption of the debt, as follows:

Redemption of—

Loan of July and August, 1861.....	\$3,600 00
Loan of July and August, 1861, continued at 3½ per cent.....	26,750 00
Loan of 1863.....	2,100 00
Loan of 1863, continued at 3½ per cent.....	1,100 00
Five-twenties of 1862.....	1,050 00
Consols of 1865.....	7,600 00
Consols of 1867.....	22,200 00
Consols of 1868.....	5,450 00
Ten-forties of 1864.....	4,000 00
Funded loan of 1881.....	2,100 00
Funded loan of 1881, continued at 3½ per cent.....	7,350 00
Loan of 1882.....	436,200 00
Old demand, compound-interest, and other notes.....	3,755 00

Purchase of—

Funded loan of 1891.....	70,414,200 00
Funded loan of 1907.....	11,266,750 00
Premium on funded loan of 1891.....	5,520,686 86
Premium on funded loan of 1907.....	3,254,535 49

Total.....	90,979,427 35
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As compared with \$103,220,464.71 at the close of the fiscal year 1888, the cash balance in the Treasury over and above all accrued liabilities at the close of 1889 was \$71,481,042.39. If to this balance there be added the estimated surplus for the current fiscal year, the amount that may be applied to the purchase of bonds to June 30, 1890, will be \$163,484,042.39. Bonds and other obligations of the United States have already been purchased and redeemed to the extent of \$50,465,485.49, leaving the available cash on hand November 1, 1889, \$45,335,762.40.

As shown by the foregoing statements the total revenues of the United States for the year ended June 30, 1889, amounted to \$387,050,058.84..

The increase over the fiscal year 1888 was \$7,783,984.08. The increase for 1888 over the fiscal year 1887 was \$7,862,797.10.

The total amount received from customs, the last fiscal year, was \$223,832,741.69, showing an increase over the year 1888 of \$4,741,568.06, and being the largest amount ever received in any one year from that source.

The total net receipts from internal revenue for the fiscal year 1889, as shown by the books of the Treasury, were \$130,881,513.92, being an increase over the year 1888 of \$6,584,641.94.

There was a decrease of \$3,163,365.44 from the sales of public lands, and of \$378,860.48 from miscellaneous sources.

The total receipts of the last fiscal year have been exceeded but six times in the history of the Government. The ordinary expenditures of the fiscal year ended June 30, 1889, exclusive of premium on bonds, were also greater than in any other year, except during the war period, and the years which bore its cost most heavily, being \$22,342,656.93 greater than for the fiscal year 1888. The expenditures for the last quarter of the fiscal year 1889 were \$9,790,696.74 less than for the last quarter of the fiscal year 1888.

The amount estimated for pensions for the year 1889 was \$76,312,400, and the estimates for same purpose, herewith submitted, for the year 1891 are \$98,587,252, showing an apparent increase of \$22,274,852. These figures, however, do not even approximately represent the actual increase of expenditure for pensions, because the estimate for the year 1889 was wholly inadequate to meet the demands of the service. The amount regularly appropriated for pensions for that year was \$81,758,700. To this was added a deficiency appropriation by last Congress of \$8,000,000, and about \$8,000,000 more were necessarily drawn from the appropriations for the current year, to pay pensions due in the fiscal year 1889, but for which sufficient appropriations had not been made. The total amount, therefore, which was actually required for pensions for the fiscal year ended June 30, 1889, was \$95,624,779.11.

The amount appropriated for pensions for the current year was the same as last year (\$81,758,700); but there is an estimated deficiency of \$24,000,000 for this year, making a total of \$105,758,700; deducting from this the \$8,000,000 drawn out, as above stated, to meet the deficiency for last year, will leave chargeable to the current year \$97,758,700. The amounts actual and estimated for pensions will therefore stand as follows:

Expended for the year ended June 30, 1889.....	\$95,624,779 11
Appropriated and estimated for year ending June 30, 1890..	97,758,700 00
Estimated for year ending June 30, 1891.....	98,587,252 00

A comparison of the expenditures of 1879 with those of 1889 will show that during the last ten years the increase of pensions has not differed very widely from the decrease of interest on the public debt:

Pensions in 1879.....	\$35,121,482 39
Pensions in 1889.....	95,624,779 11
Interest on public debt, 1879.....	10 ⁵⁰ 327,949 00
Interest on public debt, 1889.....	41,001,484 29

No patriotic American has ever complained of the vast amounts of interest paid to the men who loaned their money to preserve the integrity of the nation; much less will they complain of any just and proper recognition of the claims of men who, in the nation's hour of extreme peril, sacrificed their lives and health to save it.

Sinking-fund.

Under the requirements of the act of February 25, 1862 (Revised Statutes, §§ 3688, 3689), establishing a sinking-fund for the gradual extinguishment of the public debt, estimated for the current fiscal year at \$48,321 116.99, there have been redeemed during the months of July, August, September, and October fractional currency, Treasury notes, and bonds of the United States which had ceased to bear interest, amounting to \$11,310, in addition to the purchase of \$12,136,750 of the funded loan of 1891 and \$27,695,600 of the funded loan of 1907, at a cost to the fund for premium of \$710,666.79 on the former and \$7,536,058.37 on the latter loan. The requirements of the fund for the fiscal year 1890 have thus been practically provided for.

Purchase of bonds.

During the twelve months ended October 31, 1889, there were purchased under the circular of April 17, 1888, United States bonds to the amount of \$99,233,950. Of these, \$32,279,400 were obtained prior to March 4, 1889, and \$66,954,550 after that date.

Notwithstanding the diminished supply of bonds for sale in the markets the Government has been able to obtain at constantly decreasing prices a sufficient amount of bonds to meet the requirements of the sinking-fund for the current fiscal year and carry out the provisions of law respecting the investment of the surplus revenue. While it was necessary to pay 108 for 4½ per cent. bonds of 1891 purchased March 5, 1889, with a net premium of 7.97, they were offered and accepted October 31 at 105½, the net premium being 4.99, a decrease in actual premium of nearly 3 per cent. During the same period, or from April 6 to October 31, 1889, the price of 4 per cent. bonds was reduced from 129 to 127 and the net premium from 28.93 to 26.66, a reduction in actual premium of over 2½ per cent.

SURPLUS REVENUE.

It appears, from the foregoing estimates, that after due provision shall have been made for meeting the ordinary expenses of the Government,

including the requirements of the sinking-fund, there will remain, under the operation of existing laws, an annual surplus of revenue of about \$44,000,000.

An accumulation of money in the Treasury beyond the necessities of the Government endangers legitimate business, tends to excessive and wasteful public expenditure, and to encourage extravagance in private affairs.

In the presence of such conditions, it is a manifest duty to wisely guard against a future needless accumulation with its fruitful train of evils.

Means of reduction.

If a portion of the surplus revenue can be used to enlarge our foreign markets, and thereby advance our commercial and productive interests, it is the part of wisdom to so apply it. The strengthening of our coast defenses, and the building up of our Navy, subjects of national concern, offer further opportunity for wise expenditures that would return the money directly to the people.

But after making provision for such expenditures as may be proper and reasonable for these purposes, a large annual surplus will still remain under the operation of existing laws.

Reduction of the interest-bearing debt of the Government, by the purchase of bonds, is the expedient resorted to for returning a part of this surplus to the channels of trade, and is the only means now open to the Secretary of the Treasury for the use of this money. To require from him this measure of responsibility and discretion is of doubtful wisdom.

A possible successful appeal to this discretion tempts individuals to rash business undertakings, in the belief that the money in the Treasury will be used to avert threatened disaster. In the absence of such discretion in the Secretary, the possible use of this money would cease to enter into the calculations of the business world.

It is manifestly wrong to take money from the people for the cancellation of bonds, to the saving of only about 2 per cent of interest, when it is worth to them, perhaps, three times as much in their business. It is rather through a reduction of customs receipts and internal taxes, that an unnecessary accumulation of money in the Treasury should be avoided.

Tobacco tax.

There was received during the last fiscal year, from all sources of internal revenue, the sum of \$130,881,513.92. This, it is estimated, would be increased, under existing laws, to \$135,000,000 for the current fiscal year.

The tax collected on tobacco was as follows:

From cigars, cigarettes, and cheroots.....	\$12,677,987 60
From snuff.....	645,089 57
From manufactures of tobacco.....	17,076,899 94
From special taxes	1,466,883 31
Total.....	31,866,860 42

Whatever may be said of the moral or physical effects and influence of tobacco, it has come to be regarded as a necessity by the poor as well as the rich. It is now the only product of agriculture that is directly taxed by the Government.

The repeal of this tax would reduce the surplus about \$32,000,000.

Alcohol for use in the arts.

The subject of exempting alcohol used in the arts from internal-revenue tax deserves attention. It is estimated upon careful inquiry that about 6,000,000 gallons of alcohol are annually used in this country in a vast number of chemical and medicinal preparations of common and needful use, as well as in many of the important mechanical and industrial arts, from which a tax of \$5,400,000 is collected. Its use for these purposes would doubtless be largely increased were it not for this tax, which is equivalent to about 250 per cent. of its value. This is a direct and onerous burden upon our industrial interests and upon the consumers of the articles produced, for which there now seems to be no necessity or excuse.

As alcohol may be exported without the payment of this tax, a direct discrimination is thus made in favor of foreign manufacturers, to the serious detriment of our own industries.

The proposition to remove this tax should commend itself to the advocates of free raw material for use in domestic manufactures, and should certainly meet with favor from those who demand the free admission of wool, on which there was collected in the last fiscal year the sum of \$5,982,211.76, and the production of which has been stimulated to the notable benefit of our agricultural interests, by a rate of duty equal to about 34 per cent., while the tax upon alcohol is more than seven times greater.

The proposition to exempt alcohol for use in the arts has met with the objection that it would increase the difficulty of collecting the taxes on other distilled spirits, but the Senate amendment to House bill 9051 of the last Congress seems to provide the necessary safeguards.

In case the tax should be removed from tobacco, and from alcohol used in the arts, the reduction thus effected would be about \$37,500,000, leaving a balance from internal revenue of about \$97,500,000.

Customs revenue.

Reduction in receipts from customs presents the only other advisable means for diminishing the revenue. This can be accomplished :

First. By reduction in rates of duty upon those articles which, by reason of inconsiderate legislation, or changes which have occurred in the development of our industries, are found to be excessive.

Second. By increase in rates upon articles which have not been successfully produced here, because not adequately protected ; the obvious effect of which increase would be to stimulate domestic production and diminish importations and revenue. It is plain that such articles should either be fairly protected or placed upon the free-list.

Third. By transferring to the free list articles which, from climatic or other causes, are not and can not be successfully produced here, also articles which, under existing conditions, we can not economically produce in sufficient quantities to meet the needs of our people, or to serve the purpose of competition with foreign productions, and articles the production of which is of inconsiderable importance.

Horizontal reduction.

The cases are exceptional under our tariff in which a moderate or reasonable reduction of rates would result in a decrease of the revenue. As a general rule, a reduction in the rates of duty would increase importations in greater proportion than the rates are reduced, and so increase rather than diminish receipts. This would be the result of any plan of horizontal reduction yet proposed ; thus, a horizontal reduction of 10 or 20 per cent. in rates might result in 20 or 50 per cent. or even greater increase in the volume of imports. The tendency of this would be to largely increase the surplus, and, to the extent of the increased importations, to deprive American workmen of the employment which belongs to them, and correspondingly to reduce the price of labor. The disastrous effects of such a policy upon the country would be threefold—

First. It would diminish the demand for American labor and capital by the amount of labor and capital expended in foreign countries upon the production of such increased importations.

Second. It would withdraw from active circulation here the money required to pay the duties on these increased importations, and thus add to the evils of our present surplus.

Third. It would largely increase the adverse balance of trade with foreign countries, and contract our circulation by the amount of money necessarily exported to meet our increased indebtedness abroad.

Tariff for revenue only.

A tariff for revenue only contemplates such an adjustment of duty, as will yield the largest amount of revenue at the lowest rates. It means the largest possible quantity of importations consistent with the amount of customs revenue required to defray the expenses of the Government.

If, under a protective tariff, \$300,000,000 of importations would pay an annual revenue of \$100,000,000, to produce the same amount at half the rates, under a tariff for revenue only, would require \$600,000,000 of importations. The result of this policy, in the case supposed, would be to take from American producers their home market for \$300,000,000 of products and transfer it to their foreign competitors. While it would thus deprive our workmen of employment, it would also deplete the country of gold to pay for foreign labor and material, which should be supplied at home.

Practices of trade affecting tariff.

A tariff based upon the difference in the cost of labor and materials, in this and foreign countries, will fail of its purpose in times of over-production and depression in competing countries. Foreign manufacturers are compelled to maintain their extensive establishments in order to manufacture at the minimum cost, and as this is the only country that will buy more than is needed for present demand, it becomes, at such times, the dumping-ground for all manufacturing Europe. For a long time past a considerable proportion, at least of articles of certain lines of importations, has been of this class. They have been sold here below, in fact without regard to, the cost of production, the manufacturers looking to their own and foreign markets, which they control, for their profit.

All these conditions and practices of trade should be carefully considered in framing a tariff either for the purposes of protection or revenue.

REVISION OF THE TARIFF.

Whatever differences of opinion there may be with regard to the best method of disposing of the surplus revenue, and preventing the accumulation of money in the Treasury beyond the proper needs of the Government, and however diverse may be opinions as to the abstract question of taxation for revenue purposes, customs and internal, there is general agreement that a revision of the tariff and customs laws is urgently needed.

I believe it to be the dominant sentiment of the country that, in the adjustment of duties on imports, protection to home industry should be

a governing consideration. While there is a wide divergence of judgment on this proposition, it can not well be denied that it is the settled policy of this Government that such duties shall be so levied as to result in the protection of labor, employed in domestic industries, from destructive foreign competition.

One of the fundamental objects in the levying of duties on imports, declared in the preamble of the first tariff act passed by Congress in 1789, was the encouragement and protection of manufactures. The doctrine thus proclaimed has broadened with our advancing civilization and growth, and its wisdom has been demonstrated by the marvelous development of those industries, protected by the high duties, demanded by the necessities of the Government incident to civil war.

It should, however, be remembered that the prime object in the imposition of these high duties was the raising of revenue, and rates were adjusted to that end, rather than to the protection and development of domestic industries. It came about, therefore, that the measure of protection was capricious and unequal, and some industries were greatly prospered, while others, equally favored by natural resources and conditions, either languished or failed of development.

Inequalities.

The tariff act of 1883 was hastily considered and passed. While intended as a protective measure, it was based on former tariffs, and perpetuated many of the inequalities and other defects with which those acts abounded, and which have not only been directly hurtful to certain domestic interests, but have afforded opportunities for evasion, and provoked constant dispute and litigation.

Certain of these inequalities and defects in the present law, arise also from the changed conditions of trade and manufacture since its enactment.

Appeals and suits.

Uniformity of assessment at the several ports, and often as between importers of like merchandise at the same ports, has not been secured. Doubts as to the meaning of many of the separate provisions of the tariff schedules have led to constant appeals to the Secretary of the Treasury, which are often stimulated by speculative importers and customs attorneys, who seek to profit by the payment of the higher rates of duty, upon the basis of which the merchandise is sold to the consumer, and the chance of obtaining a refund through the action of the Treasury Department or the courts. Thus domestic producers and importing merchants are deprived of a stable basis for their business

calculations, and trade and commerce, as affected by the tariff, is thereby disturbed and unsettled. There were 25,349 appeals by importers from the decisions of collectors of customs, chiefly from the port of New York, during the last fiscal year, and there are now pending in the United States circuit court for the southern district of New York 4,497 suits, which relate to more than two hundred and fifty different articles concerning which the classification is disputed. Of these suits 1,735 were brought during the last fiscal year, and in that time only 653 were disposed of, showing an increase in the number in the fiscal year of 1,082. It will be seen that under this state of things there is no prospect that the courts will be able to dispose of this accumulated litigation, in which the amount is estimated at not less than \$25,000,000.*

As a result of this increasing practice of making protest and appeal, in all cases where the meaning of the statutes is in any sense obscure, the public has come to look rather to the Secretary of the Treasury than to Congress for relief from real or imaginary hardships attributed to the tariff. Indeed, the Secretary is constantly importuned to make rulings equivalent to tariff legislation.

All this is subversive of commercial and official morality, is destructive of legitimate trade, and appeals to the judgment of all fair-minded men for correction.

Conflicting provisions and ambiguities.

It is therefore urged that in revising the tariff schedules care be taken to avoid conflicting provisions and ambiguities, which have been productive of the evils mentioned; also that rates be so adjusted as to avoid the inequalities of the existing law so hurtful to domestic industries.

The law which imposes a duty of 1½ cents per pound on lead ore, and also exempts from duty ores of silver and gold, illustrates these conflicting provisions. Gold and silver are often combined with lead in ore. Ore of this character is claimed to be commercially silver or gold ore if the value of either exceeds that of the lead, and such has been the decision and ruling of this Department for the past ten years. It is submitted that the law as to lead ore should provide a duty upon the lead contained therein. As the law now stands, if the silver or gold is the component of chief value the lead escapes duty. On the other hand, if the lead is the component of chief value, the gold or silver is subjected to duty at the rate provided for lead. Thus the purpose of the law may be defeated in both cases.

* See report of the chief of the division of customs, in Appendix.

Duty dependent upon use.

In many provisions of the present tariff the rate of duty is made dependent upon the use to which the article is to be applied. Whether, for example, 50 per cent., 20 per cent., or 10 per cent. shall be collected, or whether the article shall be admitted free of duty, is made to depend upon the individual opinion of the customs officer, or upon the statement of the importer. This has led to inharmonious action at different ports, and has caused disputes and litigation. Conspicuous examples of this character are found in the provisions relating to hat materials, to animals imported for breeding purposes; fresh fish, for immediate consumption; soap stocks, paving-tiles, various materials used for the manufacture of fertilizers; acids used for medicinal, chemical, or manufacturing purposes; articles used for dyeing or tanning; glass plates or disks for use in manufacture of optical instruments; various vegetable substances used for beds and mattresses; vases, retorts, and apparatus for chemical uses.

Special exemptions.

I feel constrained to invite attention also to numerous provisions which exempt from duty merchandise otherwise dutiable, when imported by certain persons, societies, or associations. Notable instances are found in the exemption of the personal effects and tools of trade of persons coming from abroad, and of household effects, without limit as to quantity or value; also, so-called works of art, and various other manufactured articles. Such discriminations are harmful, not only to the importing trade, but to established domestic interests. They are in many cases without justification upon any reasonable theory, and have led to serious abuses.

Extension of trade.

Furthermore, in the construction of a tariff law in its broader sense, reference should be had not only to the changed conditions of our domestic commerce and manufactures since the enactment of previous tariffs, but also to the cultivation and extension of our trade relations with those countries whose geographical situation and resources are such as to make intimate commercial intercourse with them particularly desirable.

Undervaluations—systems of duty.

In order that Congress might have the intelligent opinion of expert officers charged with the enforcement of the tariff laws at the prin-

cipal ports, I caused to be submitted to them, for examination and criticism, three important tariff bills which were considered by the last Congress, viz: House bills 8382 and 9051, and the Senate substitute for the latter. The reports of these officers are contained in the appendix to this report, and are commended to the attention of Congress. Particular attention is invited to the statements therein, showing the alarming prevalence of undervaluations. As a remedy for this evil the substitution of specific for ad valorem duties, wherever feasible under our tariff system, is generally advocated. In this I concur; and this view is sustained not only by the fact that the commercial countries of Europe have discarded the ad valorem and adopted the specific system, but also by the opinions of a long line of my predecessors. Under high ad valorem rates pure and simple, or the more objectionable system of specific rates based on value, not only do discriminations occur between individual importers at the same port, always in favor of the unscrupulous, but different amounts of duty are collected at different ports upon merchandise of the same value. The inevitable result, as experience shows, is, that the honest trader is driven out of business, and domestic producers are insidiously deprived of the protection which the law intends to give them, and upon the faith of which their business ventures are based.

The opportunity for undervaluing afforded by this system has been generally taken advantage of, chiefly by shippers on foreign account. The tendency of this has been to concentrate the importing trade in goods subject to the higher ad valorem rates at one great port, thus depriving other ports of the business of importing merchandise of the class which they sell or distribute. This was forcibly stated by Mr. Fairchild, then Acting Secretary of the Treasury, in a communication dated June 14, 1886, to the chairman of the Committee on Ways and Means of the House of Representatives, as follows:

During the last year the proportion of the importations for the whole country which are free of duty, or which pay purely specific rates, the latter including such articles of common use as salt, soda, tin-plates, and glass, entered at New York, ranged variously from 34 to 63 per cent. While of articles subject to high ad valorem rates, such as silks, embroideries, laces, leather gloves, linens, cutlery, ornamental feathers, buttons, trimmings, hats, bonnets, etc., the proportion imported at that port ranged from 76 to 99 per cent., averaging over 85 per cent. of the entire importations of such goods into the United States. About 98 per cent. of all the silks imported into the country during the past year were entered at New York, and the average of such importations at that port for the past six years has been above 96 per cent. Fully 90 per cent. of these importations represented consignments on foreign account, and were as a rule undervalued.

Adjustment of tariff to changed conditions.

It is obvious that as the conditions of production and trade change, particular provisions of a tariff law may become inapplicable and even harmful. While legislative interference should not be so frequent as to unnecessarily disturb the commercial and industrial interests of the country, it is suggested that reports at stated periods, by expert officers specially designated for that purpose, upon the operations of the tariff laws, and indicating needed changes, would prove valuable.

CUSTOMS ADMINISTRATION.

The difficulties so embarrassing to the customs officers and the Department, growing out of the infirmities of the tariff schedules, are intensified by the inadequacy and faulty character of the laws relating to customs administration, which also needlessly and seriously annoy and hamper our citizens engaged in foreign commerce, and in many ways operate to neutralize or nullify the purposes of the tariff. These laws are derived from two hundred and sixty three acts of Congress passed during a period of ninety years. The act of 1799, the nucleus of the customs system, was at the time of its enactment, and has since been found to be, as has been well stated, "a marvel of clearness, conciseness, and accuracy." It was admirably adapted to the conditions of the period of its passage, and these did not materially change within the succeeding half century. But since then the course of commerce, the usages of trade, and the conditions of commercial transactions generally, have so changed, and the volume of business has so expanded, that many of its provisions are ill-suited to the present time. The introduction of steam-navigation, its conduct by great companies with large fleets and regular service, communication by ocean cables, and other changes in the commercial world wrought by these and other agencies, render desirable a revision of the statutes governing customs administration so as to adapt them to existing needs.

It is true that the statutes relating to this subject were included in Title XXXIV of the Revised Statutes of 1873, but this was rather a codification than a revision, as the commissioners of that revision were debarred from materially changing the phraseology of the laws, or introducing new matter. By the segregation under one title of sections derived from so many distinct laws, the revisers were unavoidably led into many errors respecting the relative arrangement of these sections, so that the imperfect character of the existing statutes is in some cases magnified by this dislocation of their parts. Since the enactment of the Revised Stat-

utes, numerous amendments and much new and fragmentary legislation have added still further to the difficulties of construction.

No matter upon what lines the tariff schedules may be revised, or whether revised at all, it is hoped that Congress will recognize the urgent need for such a revision of these statutes as will remedy the evils mentioned. The reports of the customs officers, contained in the appendix to this report, afford much information concerning these difficulties and indicate remedial legislation thought to be advisable.

Invoices—consular authentication.

There is urgent need for radical reform in the system of appraisements. Under the present law it is practically impossible to secure uniform and just valuations. The provisions relating to the form of invoices and their consular authentication should be amended so as to give appraising officers in all cases more definite information of the actual transaction which the invoice is claimed to represent than is at present required. The invoice should contain an accurate description of the goods; it should be made out in the currency of the country of export, or the currency actually paid; and where goods are obtained otherwise than by purchase, the declaration should state that the invoice represents the actual market value of the merchandise in the principal markets of the country whence exported, instead of the time and place when and where procured or manufactured, as now required by the statute; so that the declaration may conform to the legal basis of appraisalment.

Penalties for undervaluation should be made applicable to informal or *pro forma* invoices, as well as to those authenticated by consular officers.

Coverings, packing charges, etc.

It is necessary, in order to enable appraising officers to make uniform and satisfactory appraisements, that they be relieved from the embarrassments imposed upon them by the law which exempts the coverings, charges, etc., from duty, and which has been productive of constant trouble, fraud, and litigation. In very many cases merchandise has no market value apart from its coverings and incidental packing, and the arbitrary rule that a part of this value shall be deducted in the assessment of duty is illogical, and, in fact, requires the appraising officers to do an impossible thing—to work an incongruity.

Reappraisements.

The system of appointing merchants to act as members of reappraising boards, although it may have worked satisfactorily in former years

when the volume of importations was comparatively small, and importers owned the goods imported, and when disputes as to value were rare, has become, under present conditions, not only ineffective but productive of serious abuses, scandal, and contention, and is injurious alike to the revenue and legitimate trade. The remedy generally suggested, and which appears to have met the approval of reputable merchants throughout the country, is an increase in the number and an enlargement of the functions of general appraisers so as to devolve upon those officers the sole duty of hearing and disposing of appeals from original appraisements. I am of the opinion that such legislation is imperatively needed.

Punishment of frauds.

There is now no adequate means afforded by the laws for the punishment of fraud in the entry of merchandise. This is attested by the reports of the Secretaries of the Treasury during the past ten years. I concur in their repeated recommendations that the statutes should be so amended as to enable the Government to obtain the forfeiture of merchandise, or its value, upon proof of false entry, placing upon the claimant the burden of proof to show innocence of fraud in the transaction. The Government is now required to prove affirmatively not only that the goods were falsely entered, but that such entry was made with fraudulent intent, and to obtain such proof is, as a rule, impossible.

Damage allowances.

The law under which rebate of duties is allowed on imported merchandise for damage on the voyage of importation, was passed in 1799, when water transportation was confined to sailing-vessels. Owing to long voyages and incidental exposure to weather and water, merchandise was liable to damage and deterioration, from which the owner could not then, as now, protect himself by marine insurance.

Within recent years almost all merchandise subject to damage is transported in steamers making quick transit, and there is but little liability to actual damage; so that the causes which led to the enactment of the original law have largely disappeared. The law has now become a convenient means for the perpetration of frauds of the most scandalous character, is demoralizing to customs officials, and operates so uniformly and largely to the advantage of the unscrupulous, that its repeal is generally demanded by honest merchants throughout the country.

Drawbacks.

The manifest purpose of the law enacted in 1861, which authorizes the payment of a drawback on the exportation of articles manufactured from imported material on which duties have been paid, was to foster home manufactures. In practice, however, it has been found in some cases to operate to the disadvantage of domestic production. It often occurs that the materials, thus relieved from duty, are such as are the completed products of our own factories.

Was not the law intended to cover crude materials only? Congress should define more clearly the character of the materials to be exempted, as well as the extent to which such materials shall be advanced to constitute a manufacture. Applications are frequently made, and in many cases have been allowed for drawbacks where the essential work of manufacture has been done abroad, and only an insignificant amount of labor expended upon the article here in order to change its form. This results practically in a discrimination in favor of foreign labor.

The administration of the drawback laws has been attended with much difficulty, and it has been found impossible to guard against the allowance of fraudulent claims. In many cases the chief beneficiaries of these laws are foreign manufacturers, and custom-house brokers.

Refund of duties—suits.

Allusion has already been made to the great number of protests and appeals, and also to the continued accumulation of suits in customs cases, and to the impracticability of a satisfactory disposition of them with the legal machinery at present provided. The existing system of refunding duties, exacted in excess, results in intolerable delay and loss to those who have legitimate claims, and, as before shown, fosters raids on the Treasury. This system also works to the serious disadvantage of the Government in various ways, among which may be cited—

1. In the time which usually elapses between the original classification of the merchandise alleged by the importer to be illegal, the proofs upon which the action was taken by the classifying officers is often lost or has passed beyond control of the Government, by change of officers, death of witnesses, and the like.

2. When judgment goes against the Government it carries large amounts of interest and costs, to be paid in addition to the duties erroneously exacted.

3. The inducements to private gain in these cases are so great that the persons interested employ all possible means to success. They are aided by sagacious attorneys who generally make this business a specialty, and who are stimulated by large fees, usually one-half of the amount of the judgment obtained. In instances, improper and unprofessional methods have been resorted to to control juries, and secure the active or passive aid of the very officers relied upon by the Government to sustain its interests.

4. However earnest and vigilant the district attorney may be he is often overmatched by the opposing counsel and the means at their command for advancing their cases. Then, too, the interests of the Government obviously suffer from the frequent changes in the office of district attorney during the pendency of suits.

It is plain to be seen that suits thus inspired and managed are liable to result in a miscarriage of justice, and that judgments thus obtained are not a safe basis for the construction of the tariff laws.

Customs tribunal.

There is certainly imperative need for a remedy for this condition of things. Some system should be devised whereby these questions could be finally settled as they arise, and, in as many cases as possible, before the importer has made sale of his goods. The establishment of a special tribunal for the exclusive disposition of appeals in customs cases, would not only relieve the Department and the courts, but would prove of incalculable benefit to honest merchants and manufacturers, as well as to the public at large.

Oaths.

Complaint is justly made by importers in the matter of custom-house oaths. They are compelled to take these oaths before the collector at much personal inconvenience. A declaration, sanctioned by penalties, attested by any officer duly authorized to administer oaths, would afford relief, and such change is recommended.

Officers and employes of the revenue service are required to verify their accounts for official services under oath in the manner provided by sections 1790 and 2693, Revised Statutes. It is held by the Attorney-General that the fee for this oath is not a charge against the Government, but must be paid by the individual. There are more than six thousand such employes, who are compelled to pay this fee once each month or oftener. It is suggested that these statutes be repealed, and that their essential requirements be embodied in the oath taken on original appointment to office.

Bonds.

It is believed that the bond required on entry of merchandise for warehouse may safely be dispensed with. These bonds involve great inconvenience to merchants and large expense, with no corresponding benefit. The Government is protected by actual possession of the merchandise, and may be further protected by the bond of the warehouseman, and such further legislation as may be necessary to secure payment of the duties.

The bond required by section 2899 of the Revised Statutes for the return of delivered packages is of full protection to the revenue. Its conditions should be so enlarged as to secure the payment of any balance of duty found due on liquidation, or other damages sustained by the Government.

Fees.

In the organization of the customs service, in 1799, it was contemplated that its expense should be principally defrayed from fees, a schedule of which was then fixed. These collections long since proved inadequate to the needs of the service, and appropriations for its support have been made by Congress.

These fees are now an insignificant factor in considering the expense of collecting the revenue—the total amount collected during the fiscal year ending June 30, 1888, was only \$454,590.75.

They are gathered from various sources for various services, and in amounts ranging from 10 cents to several dollars, the major portion being in sums of 50 cents and less. These collections impose a labor on the customs officers, and constitute an annoyance to individuals in excess of any public benefit.

Fees for like services vary by statute in different sections of the country, and the public are often led to believe that they are petty exactions, resulting from the greed of the officer who demands them for his personal benefit. As matter of fact there is seldom any foundation for such belief. But in some cases, when the total of fees collected fail to carry the collector's compensation to the maximum it is known that the collector has resorted to strained and unusual construction of the law and exacted illegal and excessive fees to increase his income. These exceptional demands are made possible by the existence of the fee-bill, and the persons on whom they are made are constrained to pay them, rather than risk delays and hostile acts that would work them greater loss. No satisfactory reason appears for the continuance of the system.

It does not comport with the dignity of the Government to exact a 10-cent fee for an official service. It has outgrown the necessity of sitting at the doors of its custom-houses and collecting admission fees from those it compels to come there to do business.

Compensation of collectors.

In the interest of a better service a change is demanded in the matter of the compensation of collectors, who should be paid fixed salaries adjusted to the duties and responsibilities of their respective offices. Some of these officers are now paid fixed salaries in full of all services, others are compensated by salaries supplemented by certain fees, commissions, and allowances. An additional allowance is made for storage in the sum of \$2,000, if so much be paid at the port. This allowance, under the decisions of the courts and of the accounting officers, is worked out in a way not readily comprehended, and opens the door to questionable, if not fraudulent methods. No equivalent service is rendered for it. The maximum compensation of collectors on the northern frontier, paid in this way, is \$4,500, while collectors on the sea-board and surveyors at interior ports may thus receive \$5,000. But certain collectors on the northern, northeastern, and north-western frontier have received in addition large sums from certain railroad companies from the sale of blanks, under the provision of section 2648, Revised Statutes. In some instances the annual income of the collector from the sale of these blanks has exceeded his official salary by \$10,000 or \$15,000. It has been an open secret, for years, that the sale of blanks by the collectors to railroad companies rather than the official salary has been the pecuniary significance of certain offices. It may be that thus far the Government has been fortunate in the selection of these officers, and notwithstanding the financial obligation to the railroad companies, they have held an even hand between them and the Government. But it requires only a statement of the case to disclose a temptation and motive, in the case of two masters, to serve the one paying the most money. The conditions are vicious and can be supported by no honest or administrative argument.

It is earnestly recommended that collectors be compensated by fixed salaries, and that they shall not, directly or indirectly, because of their office, receive any other pecuniary fee or compensation whatever.

Consolidation of customs districts and readjustment of salaries.

The consolidation of customs collection districts has been the subject of frequent recommendation to Congress. Legislation in this regard is

again recommended in the interest of an economical and efficient service. In the early organization of collection districts regard was had to the then existing conditions of our commerce and foreign trade confined to the sea-ports. The laws for their organization made them to comprise "all the waters and shores," or "all the waters, shores, and rivers connected therewith." No interior lines were described, nor was it then found necessary to divide the entire country into collection districts. Foreign merchandise arrived by sailing-vessels and was entered at various sea-ports of first arrival. But the changed conditions wrought by steam carriage and other agencies have destroyed the commercial importance of many of the old-time sea-ports, and carried trade inland, building up great commercial centers removed from the former lines of water transportation. It has resulted that a considerable number of collection districts exist now only in name and in their demands on the Government for money to defray the expense of needless equipment. In the interest of good administration they should be abolished, and their territory included in other districts, care being taken to provide for requisite preventive service and the convenience of the merchant marine.

Comparatively recent legislation has authorized the carriage of foreign dutiable merchandise inland for the payment of duty, and interior ports are rivaling those of the sea-coast in the revenue they return to the Treasury. Some of these are ports of entry in collection districts that have well defined boundaries, others are mere ports of delivery, with no jurisdiction beyond municipal limits. It results that while the entire country is open to trade, and dutiable goods are transported to all parts of it, certain portions are not included in any well-defined customs district. It is uncertain what collector, if any, may exercise jurisdiction in case of fraud committed therein on the customs revenue. The useless collection districts should be abolished, and new ones established wherever demanded in the interest of a safe and economical service. It is deemed of vital importance that there be an early reconstruction of collection districts, with well-defined boundaries, to include the entire territory of the United States.

In doing this, unnecessary offices should be abolished, the salaries in some cases reduced, and, at certain ports of growing importance, new offices should be established to meet the needs of the service. The salaries of the appraisers at the principal ports, now inadequate, should be increased so as to be made commensurate with the important and responsible duties devolving upon them.

Revision of customs laws.

Many of the reformatory changes in the customs laws above suggested have been embodied in one form or another in bills introduced in the last Congress. These were doubtless the result of careful investigation and consideration by the appropriate committees, and their general features are understood to have had the approval of my immediate predecessor. It is not improbable that these or similar measures will be again introduced, with better promise of enactment. Believing the changes thus proposed would greatly benefit customs administration, I urgently recommend them to the early and favorable consideration of Congress.

While recommending this legislation, I earnestly invite attention to the necessity for a complete codification and revision of the customs laws, to include such modifications and new provisions as practice and experience have demonstrated are required for the efficiency of the system.

Materials for such a codification and revision have been collected and partially formulated, under my direction, by competent officers of this Department. These materials are intended for, and will be at the disposal of, Congress.

Conferences of local appraisers.

Quarterly conferences of local appraisers, under special appropriation for that purpose, have been held regularly at New York during the year.

The anticipated benefits of these conferences have been realized in more uniform appraisements and classification at the several ports, and generally in more intelligent and satisfactory administration of this important branch of the customs service.

These officers, at their conferences, have also materially aided the Department by their advice upon important questions of classification, which from time to time have been submitted to them for their opinion.

It is recommended that the appropriation for these conferences be continued.

Expenses of collecting the revenue from customs.

Should the fund for the expenses of collecting the revenue from customs continue to be derived from a permanent appropriation, with the addition of the contingent receipts from certain sources now available, it should be materially increased to meet the changed conditions since it was last fixed by enactment.

Serious embarrassments have occurred several times through deficiency in this appropriation, which has proved insufficient to defray the necessary expenses of collection, the average annual cost of which exceeds \$7,000,000.

The fund at disposal is derived from the permanent annual appropriation of \$5,500,000 made by the act of March 3, 1871, "and in addition thereto such sums as may be received from fines, penalties, and forfeitures connected with the customs and from fees paid into the Treasury by customs officers, and from storage, cartage, drayage, labor, and services," which, on the date of the passage of the act, amounted to nearly \$2,000,000.

Since that time the annual receipts from these sources have diminished about \$1,000,000, in consequence of legislation affecting fines, penalties, and forfeitures, and the abolition of many of the official fees.

Since 1871 the volume of customs business has largely increased. The entire system of transportation of goods without appraisement at the ports of first arrival has been established, involving additional expense through the creation of new ports.

Three times during this period there has been a deficiency in the means available for the expenses of collecting the customs, causing much embarrassment in the conduct of the service, and hardship to employes, who were obliged to wait for their pay until appropriations for deficiencies were made.

There has also been a lack of means to increase the efficiency of the service, and to detect and prevent frauds upon the revenue.

The maintenance of this important branch of the Government should not be dependent upon contingent receipts, always fluctuating in amount and impossible of accurate estimate. It is suggested that all official receipts under the statute relative to the collection of duties, and amounting to about \$1,000,000 per annum, be covered into the Treasury as a part of the general receipts, and that the permanent annual appropriation for the expenses of collecting the revenue from customs be increased to \$7,500,000.

FOREIGN COMMERCE.

The total value of our imports and exports of merchandise and specie during the last fiscal year was \$1,613,127,033, an increase over the preceding year of \$37,473,843, and was greater than for any year since 1881.

The value of the imports and exports of merchandise and specie during the last three fiscal years has been as follows:

Merchandise.

	1887.	1888.	1889.
Exports—			
Domestic	\$703,022,923	\$683,862,104	\$730,282,609
Foreign	13,160,289	12,092,403	12,118,766
Total.....	716,183,211	695,954,507	742,401,375
Imports.....	692,319,768	723,957,114	745,131,652
Excess of exports.....	23,863,443		
Excess of imports.....		28,002,607	2,730,277

Specie.

	1887.	1888.	1889.
Exports—			
Gold	\$9,701,187	\$18,376,134	\$59,952,285
Silver	26,296,504	28,037,949	36,689,248
Total.....	35,997,691	46,414,183	96,641,533
Imports—			
Gold	42,910,601	43,934,317	10,284,858
Silver	17,260,191	15,403,669	18,678,215
Total.....	60,170,792	59,337,986	28,963,073
Excess of exports.....			67,678,460
Excess of imports.....	24,173,101	12,923,803	

The exports of gold, exclusive of ores, during the last fiscal year were \$59,952,285, the largest since 1875; the imports were \$10,284,858. This excess of exports over imports of gold occurred mainly in May and June last, amounting during those months to \$30,000,000. This excess was largely due to the increase of foreign travel on the part of our people and the consequent increased demand for foreign exchange.

Exports.

The total value of exports of domestic merchandise was \$730,282,609 for the fiscal year 1889, an increase of \$46,420,505 over the preceding year, and was greater than that of any year except 1880, 1881, 1882, and 1883.

The following articles of domestic merchandise exported have materially increased or decreased during the fiscal year:

Increase.

Corn.....	\$19,626,327
Cotton, unmanufactured.....	14,758,510
Provisions.....	11,064,364
Animals	5,489,715
Wood and manufactures of.....	3,949,362

Increase—Continued.

Mineral oils, refined	\$3, 570, 144
Iron and steel, and manufactures of.....	3, 393, 043
Copper ore	2, 453, 571
Seeds.....	2, 357, 814
Fish.....	1, 791, 305
Hops	1, 620, 772
Fruits and nuts.....	1, 561, 376
Leather, and manufactures of.....	1, 164, 295

Decrease.

Wheat.....	\$14, 588, 767
Wheat flour.....	9, 481, 225
Tobacco, unmanufactured	3, 035, 016
Cotton, manufactures of	2, 800, 545
Copper ingots, bars, etc.....	1, 553, 830
Sugar, refined.....	1, 114, 552

There was an increase in the value of domestic exports, as follows :

To The United Kingdom.....	\$21, 751, 341
To Germany.....	10, 947, 431
To France.....	7, 326, 635
To British North American Provinces.....	5, 374, 623
To South America.....	5, 045, 180
To West Indies.....	2, 972, 889

And a decrease in the value of domestic exports, as follows :

To Russia in Europe.....	\$2, 950, 947
To Spain.....	2, 377, 845
To Belgium	2, 032, 799
To China.....	1, 790, 462

The imports during the last fiscal year was the largest in the history of our commerce, amounting to \$745,131,652, an increase of \$21,174,538 over the fiscal year 1888.

The value of the principal articles of domestic exports during the three years ending June 30, 1889, was as follows :

Articles.	1887.	1888.	1889.
Animals	\$10, 598, 362	\$12, 885, 090	\$18, 374, 805
Breadstuffs	165, 768, 662	127, 191, 687	123, 876, 661
Coal.....	4, 526, 325	6, 295, 380	6, 690, 479
Copper, and manufactures of.....	3, 727, 447	3, 812, 798	2, 348, 954
Cotton, and manufactures of.....	221, 151, 399	236, 029, 949	247, 987, 914
Furs and fur-skins.....	4, 807, 277	4, 777, 246	5, 034, 435
Iron and steel, and manufactures of.....	15, 963, 756	17, 763, 034	21, 156, 077
Leather, and manufactures of.....	10, 430, 138	9, 583, 111	10, 747, 706
Oil-cake and oil-cake meal.....	7, 309, 691	6, 423, 930	6, 927, 912
Oil, mineral.....	46, 824, 915	47, 042, 409	49, 913, 677
Provisions:			
Meat products.....	82, 945, 994	82, 142, 687	93, 403, 418
Dairy products	9, 837, 302	10, 916, 018	10, 719, 026
Sugar	11, 442, 337	2, 192, 290	1, 076, 410
Tobacco, and manufactures of.....	29, 230, 672	25, 514, 541	22, 609, 668
Wood, and manufactures of.....	19, 574, 934	23, 063, 108	26, 910, 672
Total.....	644, 225, 211	615, 633, 578	647, 777, 814
Value of all domestic exports.....	703, 022, 923	683, 862, 104	730, 282, 609
Per cent. of enumerated articles to total.....	91.6	90.2	88.7

The value of domestic exports during the two years ending June 30, 1889, classified by groups according to character of production, was as follows:

	1888.		1889.	
	Values.	Per cent.	Values.	Per cent.
Products of agriculture.....	\$500,840,086	73.23	\$532,141,490	72.87
Products of manufacture.....	130,300,087	19.05	138,675,507	18.99
Products of mining (including mineral oils).....	17,333,895	2.63	19,247,518	2.73
Products of the forest.....	23,991,092	3.51	26,997,127	3.70
Products of the fisheries.....	5,518,552	.82	7,106,388	.97
Other products.....	5,218,392	.76	5,414,579	.74
Total.....	683,862,104	100.00	730,282,609	100.00

Imports.

The total value of the imports for the fiscal year 1889 was \$745,131,652, an increase of \$21,174,538 over the preceding year, of which the sum of \$12,445,463 represents the increase in the value of free merchandise, and \$8,759,075 the increase in the value of dutiable merchandise.

The following classes of importations have materially increased or decreased in value during the fiscal year:

Increase.

Free of duty:

Coffee.....	\$14,217,252
Ore, silver-bearing	1,836,156
Sugar, brown, (from Hawaiian Islands)	1,818,470
Goat skins	1,299,061

Dutiable:

Sugar.....	12,480,295
Wool, manufactures of.....	4,845,549
Hemp, and substitutes for, including sisal grass, etc.....	3,178,351
Seeds, not medicinal, not elsewhere specified.....	2,325,199
Tin plates, terne plates, or taggers tin.....	2,243,309
Wool, raw	2,087,298
Flax, hemp, jute, etc., manufactures of... ..	1,963,382
Silk, manufactures of	1,771,767
Coal, bituminous	1,082,504

Decrease.

Free of duty:

India rubber and gutta-percha, crude.....	\$3,680,131
Articles, the growth, etc., of the United States brought back.....	2,603,809
Tin, bars, blocks, etc.....	1,744,067

Dutiable:

Vegetables	5,095,625
Bars, railway, of iron or steel	2,642,997

Decrease—Continued.

Dutiable:

Pig-iron.....	\$2, 182, 424
Hats, bonnets, and hoods, and materials for	2, 138, 476
Cotton, manufactures of.....	2, 111, 857
Ingots, blooms, etc., of steel	1, 982, 257
Fruits, including nuts.....	1, 919, 301
Scrap—iron and steel, fit only to be remanufactured	1, 667, 813
Wire rods.....	1, 148, 086

There was an increase in the value of our imports as follows:

From Brazil.....	\$6, 693, 570
From West Indies.....	6, 381, 667
From Mexico.....	3, 923, 712
From Germany.....	3, 320, 711

And a decrease in the value of our imports as follows:

From Japan.....	\$1, 933, 584
From France.....	1, 798, 648
From Netherlands.....	1, 405, 531
From Austria-Hungary.....	1, 041, 231

Imports entered for consumption.

The value of imported merchandise entered for consumption in the United States, and the duty collected thereon, during the last five fiscal years, has been as follows:

Year ending June 30—	Value of merchandise.		Duty collected.	Average rate collected on—	
	Free of duty.	Dutiable.		Dutiable.	Free and dutiable.
				<i>Per cent.</i>	<i>Per cent.</i>
1885	\$192, 912, 234	\$386, 667, 820	\$177, 319, 550	45.86	30.59
1886	211, 530, 759	413, 778, 055	188, 379, 897	45.55	30.13
1887	233, 093, 659	450, 325, 322	212, 032, 424	47.10	31.02
1888	244, 104, 852	468, 143, 774	213, 509, 802	45.63	29.99
1889	256, 574, 630	484, 856, 768	218, 701, 774	45.13	29.50

The principal changes in duties collected were an increase on sugar and molasses, wool and manufactures of wool, manufactures of silk, manufactures of flax, hemp, and jute, and tobacco, and a decrease on manufactures of iron and steel and manufactures of cotton.

The following table shows the value of the principal articles of imported merchandise entered for consumption during the two years ending June 30, 1889:

Free of duty.

Order.	Articles.	1888.	1889.
		<i>Values.</i>	<i>Values.</i>
1	Coffee.....	\$60,509,522 29	\$74,723,203 73
2	Chemicals, drugs, dyes, and medicines.....	25,679,931 59	26,615,446 11
3	Hides and skins, other than fur skins.....	23,972,616 58	25,137,511 30
4	Silks unmanufactured, cocoons, eggs, etc.....	19,932,337 00	19,333,229 00
5	Teal.....	13,473,919 38	12,643,987 91
6	India-rubber and gutta-percha.....	16,077,262 00	12,387,427 00
7	Tin bars, blocks, or pigs, grain or granulated.....	8,758,562 00	7,026,647 00
8	Ores (emery, gold, and silver).....	5,238,647 00	6,841,749 00
9	Fruits, including nuts.....	5,774,847 97	5,549,896 57
10	Paper stock, crude.....	5,462,255 88	5,927,099 46
11	Wood, unmanufactured.....	4,140,768 72	4,437,782 03
12	Animals.....	3,336,621 75	3,286,660 55
13	Spices, unground.....	3,341,069 66	2,988,471 39
14	Household effects, etc., of immigrants.....	2,989,496 23	2,726,343 45
15	Hair.....	2,129,938 60	2,431,526 00
16	Eggs.....	2,312,476 56	2,419,004 37
17	Cocoa, or cacao, crude, leaves and shells of.....	2,252,031 00	2,143,268 00
18	Furs and fur skins, undressed.....	1,952,305 37	2,077,731 57
19	Oils, fixed or expressed and volatile or essential.....	2,029,733 87	1,741,305 07
20	Fertilizers.....	1,003,829 00	1,629,137 75
22	Fish.....	1,385,514 42	1,573,983 73
23	Cork wood or cork bark, unmanufactured.....	1,030,695 00	902,047 00
	All other free articles.....	31,317,481 79	31,631,736 17
	Total free of duty.....	244,104,852 46	256,574,630 46

The following are the principal articles of imported merchandise from which the customs revenue was derived during the two years ending June 30, 1889:

Dutiable.

Articles.	1888.		1889.	
	Value.	Duty collected.	Value.	Duty collected.
Sugar, molasses, etc.....	\$68,973,214 36	\$52,007,879 89	\$83,419,276 89	\$55,995,137 10
Wool and manufactures of—				
Wool, raw.....	14,062,100 10	4,729,486 50	17,432,758 71	5,982,211 76
Manufactures of.....	47,158,045 16	32,213,120 74	52,681,482 56	37,373,627 05
Total.....	61,220,145 26	36,942,607 24	70,114,241 27	41,355,838 81
Iron and steel and manufactures of—				
Iron ore and pig iron.....	6,869,228 18	2,882,886 34	4,395,452 07	1,700,427 51
Manufactures of.....	44,210,741 53	18,400,946 11	39,114,631 59	15,268,912 64
Total.....	51,079,969 71	21,283,832 45	43,510,133 66	16,969,340 15
Silk, manufactures of.....	32,942,629 03	16,351,685 48	34,956,728 77	17,342,571 54
Flax, hemp, jute, etc., and manufactures of—				
Raw.....	16,597,150 00	2,388,002 33	18,467,822 30	2,482,746 30
Manufactures of.....	23,015,568 10	7,914,692 99	25,955,222 78	8,458,502 12
Total.....	39,612,738 10	10,302,695 32	44,423,045 08	11,400,548 42
Tobacco and manufactures of.....	12,314,428 66	9,734,987 35	13,733,912 60	11,194,486 68
Cotton manufactures.....	28,706,702 67	11,491,897 37	27,105,519 35	10,841,969 54

Dutiable—Continued.

Articles.	1888.		1889.	
	Value.	Duty collected.	Value.	Duty collected.
Liquors—malt, spirituous, and wines—				
Malt liquors.....	\$1,353,889 50	\$666,666 39	\$1,322,258 43	\$663,337 03
Spirits, distilled.....	1,972,287 27	2,981,772 22	1,902,879 68	2,943,218 08
Wines.....	7,810,190 09	4,014,805 58	7,713,651 77	4,179,814 71
Total.....	10,636,366 86	7,663,244 19	10,938,789 88	7,786,399 87
Chemicals, drugs, dyes, and medicines.	12,814,525 85	4,622,441 94	13,186,289 31	5,017,033 42
Glass and glassware.....	7,721,453 31	4,799,251 52	7,750,577 12	4,526,581 52
Fruits, including nuts.....	15,106,531 08	4,477,555 21	12,902,825 39	4,007,912 75
Earthen, stone, and china ware.....	6,262,337 59	3,568,276 56	6,473,357 73	3,694,401 94
Leather and manufactures of.....	11,671,497 21	3,479,248 89	11,202,906 85	3,417,682 58
Fancy articles.....	7,237,822 46	3,022,742 22	6,639,966 58	2,781,010 12
Wood and manufactures of—				
Unmanufactured.....	18,188 39	3,426 39	19,845 05	3,914 98
Manufactures of.....	9,363,092 22	1,681,633 78	9,748,799 11	1,772,696 00
Total.....	9,381,280 61	1,685,060 17	9,768,644 16	1,776,610 98
Jewelry and precious stones.....	11,032,310 74	1,182,334 31	11,389,179 81	1,232,350 69
Breadstuffs.....	8,215,337 07	1,115,811 23	7,858,962 23	1,161,026 89
Furs and manufactures of.....	4,811,412 44	971,195 86	5,224,431 48	1,054,802 18
Hats, bonnets, and hoods, and materials for.....	5,748,751 83	1,241,915 45	4,247,000 46	942,731 40
Animals.....	4,661,849 06	932,369 81	3,917,031 84	783,406 37
All other articles.....	57,942,417 08	10,635,359 08	56,073,896 94	15,470,900 81
Total.....	468,143,773 98	208,509,811 57	484,856,767 90	218,701,773 76

NAVIGATION.

The Bureau of Navigation reports the entire tonnage of the United States to be as follows:

Documented vessels.	1889.	
	No.	Tons.
Registered	1,681	1,021,594.84
Enrolled and licensed.....	21,942	3,285,880.40
Total.....	23,623	4,307,475.24

“Registered” vessels only can engage in foreign trade, but they may also carry on coasting trade. Our total foreign tonnage, not including those engaged in the whale fisheries, is 999,618, of which 190,196 tons are steam, and 809,422 tons sailing vessels. “Enrolled and licensed” vessels may carry on coasting trade, including trade with Canada, on the lakes. The coasting trade includes trade along the sea-coast, and on the navigable rivers and lakes of the United States.

Of our total tonnage, 1,765,551 tons are steam, and 2,541,924 tons are other than steam.

The registered tonnage of the United States has increased 6,632 tons in the last two years, while the enrolled and licensed tonnage has in the same period increased 195,598 tons.

Our sailing tonnage has decreased 25,172 tons, and our steam tonnage has increased 117,482 tons during the last year.

Our domestic tonnage is thirteen times greater than our registered in number of vessels, and three times greater in tonnage.

The vessels built during the last fiscal year were as follows:

Class.	1889.	
	No.	Tons.
Sailing vessels.....	489	50,569.77
Steam vessels.....	440	159,318.31
Canal boats.....	88	9,452.61
Barges.....	60	11,793.64
Total.....	1,077	231,134.33

The following table shows the tonnage built, apportioned in respect to the several grand divisions of the country:

Grand divisions.	1886.		1887.		1888.		1889.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Atlantic and Gulf coasts..	496	53,541.00	540	73,921.17	601	82,138.43	637	93,912.24
Pacific coast.....	58	5,913.02	73	9,139.61	104	21,956.43	112	17,939.43
Northern lakes.....	85	20,400.54	152	56,483.32	222	101,102.37	225	107,080.30
Western rivers.....	76	10,594.93	79	10,900.93	84	11,859.15	83	12,202.36
Total.....	715	95,453.39	844	150,450.03	1,014	218,086.38	1,077	231,134.33

The tonnage of iron vessels built in 1889 was 53,513 tons. During the last fiscal year there were built at the lake ports 14 iron vessels, with a tonnage of 29,415 tons, making the documented iron tonnage on the lakes 96,774 tons. The tonnage on the Northern lakes June 30, 1889, was 972,271 tons, numbering 3,412 vessels. On the Western rivers, for the year ending June 30, 1889, the tonnage was 269,427.47 tons, and on the Pacific coast, the same date, it was 436,272.72 tons.

The following table shows the rapid encroachments of foreign vessels upon our foreign carrying trade during the last thirty-two years.

Values of the imports and exports of merchandise of the United States carried, respectively, in cars and other land vehicles, in American vessels, and in foreign vessels, during each fiscal year from 1857 to 1889, inclusive, with the percentage carried in American vessels (coin and bullion included from 1857 to 1879, inclusive, as method of transportation can not be stated).

Year ending June 30—	Imports and exports—				Percentage carried in American vessels.
	In cars and other land vehicles.	In American vessels.	In foreign vessels.	Total.	
1857.....		\$510,331,027	\$213,519,796	\$723,850,823	70.5
1858.....		447,191,804	160,066,267	607,257,571	73.7
1859.....		465,741,381	229,816,211	695,557,592	66.9
1860.....		507,247,757	255,040,793	762,288,550	66.5
1861.....		381,516,788	203,478,278	584,995,066	65.2
1862.....		217,695,418	218,015,296	435,710,714	50.0
1863.....		241,872,471	343,056,631	584,929,502	41.4
1864.....		184,061,486	455,793,548	639,855,034	27.5
1865.....		167,402,872	437,010,124	604,412,996	27.7
1866.....		325,711,861	685,226,691	1,010,938,552	32.2
1867.....		297,834,904	581,330,403	879,165,307	33.9
1868.....		297,981,573	550,546,074	848,527,647	35.1
1869.....		281,063,772	536,428,312	817,492,084	34.4
1870.....		352,969,401	638,927,438	991,896,839	35.6
1871.....	\$22,985,510	353,664,172	755,822,576	1,132,472,258	31.2
1872.....	27,650,770	345,331,101	839,346,362	1,212,328,233	28.5
1873.....	27,869,978	346,306,592	366,723,651	1,340,899,221	25.8
1874.....	23,022,540	350,451,994	939,206,106	1,312,680,640	26.7
1875.....	20,388,235	314,257,792	884,788,517	1,219,434,544	25.8
1876.....	18,473,154	311,076,171	813,354,987	1,142,904,312	33.1
1877.....	17,464,810	316,660,281	859,920,536	1,194,045,627	26.5
1878.....	20,477,864	313,050,906	876,991,129	1,210,519,399	25.9
1879.....	19,422,485	272,015,692	911,269,562	1,202,707,739	22.6
1880.....	20,981,393	258,346,577	1,224,265,434	1,503,593,404	17.13
1881.....	25,452,521	250,536,470	1,269,002,983	1,545,041,974	16.22
1882.....	34,973,817	227,229,745	1,212,978,769	1,475,181,831	15.40
1883.....	38,012,412	236,129,549	1,258,506,921	1,532,648,982	14.34
1884.....	46,714,068	233,609,035	1,127,798,199	1,408,211,302	16.60
1885.....	46,832,775	194,865,743	1,079,518,566	1,319,717,084	14.76
1886.....	43,700,350	197,349,503	1,073,911,113	1,314,960,966	15.01
1887.....	48,951,725	194,356,746	1,165,194,508	1,408,502,979	13.80
1888.....	54,356,827	190,857,473	1,174,597,321	1,419,911,621	13.44
1889.....	66,664,378	203,805,108	1,217,063,541	1,487,533,027	13.70

The coasting, river, and lake trade of the United States during the same period has been, and is likely to remain, in a flourishing condition so long as it is afforded its present protection.

Persistent efforts have been made, from time to time, to break down the safeguards thrown around our domestic commerce and export to the system of free trade, which has wrought such sweeping destruction in our foreign shipping interests. In the light of experience it is difficult to understand how any one, who is not more interested in foreign prosperity than in our own, can desire to see this protection withdrawn.

Bonds on documenting of vessels.

Investigation made by the Bureau of Navigation indicates that the annoyance and inconvenience occasioned by the present legislation, requiring the execution of bonds as a basis for the issue of marine documents to vessels, exceeds any compensating benefits derived there-

from. Experience shows that the bonds are seldom, if ever, put in suit, and rarely become forfeitable. I recommend their discontinuance and the substitution of such statutory penalties as may be deemed necessary.

Amendment of laws regulating tonnage tax.

The Bureau finds that the operation of the provisions of section 11 of the act of June 19, 1886, entitled "An act to abolish certain fees," etc., has not resulted in the action by foreign Governments contemplated by Congress. The legislation alluded to provides that the President of the United States shall suspend the collection of so much of the regular tonnage tax imposed on foreign vessels as may be in excess of the tonnage and light-house dues, or other equivalent tax or taxes, imposed on American vessels by the Government of any foreign country, and that he shall indicate, by proclamation, the ports to which such suspension shall apply as often as it may become necessary by reason of changes in the laws of the foreign country. It is not known that the privilege offered has led to the abolition of any tax on American vessels by any foreign Government. The advantage accrues mainly to foreign vessels, and as there seems to be no good reason why vessels from one foreign country, without recompense, should escape taxes levied under similar circumstances on vessels from other countries, the repeal of the proviso is recommended.

The Government of Sweden contends that the distinction now made by law is in conflict with the treaty between that country and the United States.

Signals for ships, etc.

Some additional legislation may be found necessary regarding signals for ships, pilotage, and like subjects, upon the conclusion of the labors of the Maritime Conference now in session.

Our merchant marine.

It is but a few years since we stood first among the nations in ship-building, and were excelled only by Great Britain in the amount of our ocean tonnage. Now, so far as foreign trade is concerned, our ship-yards are comparatively silent, and our flag has almost disappeared from the high seas. Once 75 per cent. of our tonnage was carried in our own ships; now 87 per cent. is carried in foreign bottoms. Once our ocean commerce enriched our own countrymen; now our immense tonnage of exports and imports gives employment mainly to alien labor, and alien capital levies upon our people an annual tribute

estimated at \$150,000,000 for freights and fares. Nor is this tribute the only, or even the worst, feature of the case, for our farmers and mechanics are practically excluded from the markets of the world, except as they may be reached by the circuitous routes prescribed for their own advantage and convenience, by our great competitors in these markets. An overwhelming public sentiment demands that this humiliation and loss shall cease. If our industrial interests are to prosper, if our commerce is to be sustained, extended, and increased, we must cease to be dependent upon any other nation or people for access to foreign markets.

Doubtless there are serious obstacles in the way, and they are greater now than they were a few years ago, on account of the immense capital invested by foreign steamship companies, with which we shall have to compete. These obstacles will constantly increase, for every year adds largely to the capital thus invested. Whatever is to be done must be done promptly. We have tried the do-nothing policy long enough. Its results are before us, and they are not satisfactory. Shall we accept as inevitable our present humiliating and unprofitable position, or shall we use means at command to regain our lost power and prestige on the ocean? Shall we give that protection and encouragement to our shipping interests that other nations give to theirs, and which we freely give to all our other great interests? Or shall we, by continued neglect, suffer them to be utterly destroyed?

The lessons taught by the founders of the Government on this subject may be read, just now, with great profit. The second act passed by the First Congress, July 4, 1789, was for the protection of American shipping by the imposition of a discriminating duty of more than 100 per cent. on Asiatic trade, notably on teas brought in foreign vessels.

The third act passed by that Congress, July 20, 1789, imposed discriminating tonnage duties on foreign vessels entering our ports, as follows:

	Cents.
American vessels.....per ton...	06
American built vessels belonging to foreigners.....do.....	30
All other vessels.....do.....	50

The same Congress on the 1st of September, 1789, prohibited any but American vessels from wearing the American flag.

The men who had achieved the independence of the Republic left no doubt of their purpose to protect its interests on the water, as well as on the land. So great was the development of our ship-building and shipping interests, under the fostering influence of those acts, that we sold ships amounting to hundreds of thousands of tons to foreigners,

and our merchant-marine soon became the pride of every citizen, and the envy of the world.

Voicing the national sentiment in 1825, Daniel Webster said, "We have a commerce which leaves no sea unexplored; navies which take no law from superior force." How like bitter irony these words would sound in 1888. The brilliancy of our achievements on the ocean begat overconfidence, and, listening to the voice of free trade, Congress on the 24th of May, 1828, passed an act withdrawing all protection from our shipping interest, and opening our ports to the ships of all nations upon the same terms as to our own. Notwithstanding this, our merchant-marine continued to be prosperous so long as wooden vessels were the only vehicles of commerce and other nations refrained from paying heavy subsidies to their ships. But when iron steamers took the place of wooden sail-vessels, and European Governments began to pour their contributions into the treasuries of their steamship companies, the decadence of American shipping began and has continued ever since. No other result was possible under the circumstances. When we opened our ports to the vessels of the world, upon the broadest principles of equality and free trade, other nations seized the advantages thus offered, and at once began the system of liberal subsidies, while this nation left her citizens to compete unaided against foreign ship-owners backed by the power and financial aid of their Governments. The total amount which has thus been contributed to aid in sweeping our commerce from the ocean, is not accurately known, but the following conservative statement will give some idea of what our people have had to contend with, in their heroic but vain efforts to maintain a respectable merchant-marine.

From 1830 to 1885 Great Britain paid out of her treasury to steamship companies for mail contracts and subsidies over \$250,000,000, and since 1885 she has paid annually an average of \$3,750,000.

The Italian Government pays an annual subsidy of \$1,570,000.

France pays a graduated bounty for construction of vessels, from \$2 to \$12 per ton, and also a bounty per mile run. The sums asked for in the French budgets of 1888 and 1889 under these heads amounted to about \$1,650,000; the annual outlay from 1881 to 1886 is stated at about \$3,500,000.

Germany contributes largely to the support of her steamships, paying, as has been stated, nearly \$1,000,000 a year to a single line, which has supplanted an unsubsidized American line, formerly running between New York and Bremen.

Spain pays a bounty of 23 on the tonnage built in that country, in accordance with the established regulations, and provides for a rebate

of duties on articles imported for the construction of vessels. Her annual compensation for ocean mails is said to be over \$1,000,000.

The United States alone, of the great commercial nations, while encouraging railroads by liberal grants and subsidies, and protecting her coastwise and internal commerce and all her home industries, has utterly neglected and abandoned her great foreign maritime interests, even declining to pay fair rates for services rendered by vessels of the United States, although Congress had appropriated money for the purpose.

American merchants, ship-builders, and ship-owners ask no special advantages. Give them an equal chance and they will hold their own against all competitors. But they can not be expected long to maintain the unequal contest against foreign capital, backed by foreign treasuries. Some of our broad-minded and patriotic citizens are still struggling to maintain a few lines, by which direct communication is kept open, notably with South America, the West Indies, and China and Japan. The line to Brazil has to contend with the ships of England, Germany, Spain, and Italy, all of which are heavily subsidized for the purpose of extending the commerce of their respective countries. The lines to the West Indies come in direct competition with Spanish ships running between Havana, New York, Boston, and Quebec, and receiving governmental bounties amounting to \$20,307 per round trip.

American vessels running between San Francisco and Asiatic ports, and receiving mail compensation of only \$14,446.32 a year, have to compete with the subsidized ships of England and other countries, and especially with the new line recently established for the express purpose of preying upon our commerce, both on land and sea. This latest and boldest attack upon our transportation interests is backed by subsidies of \$300,000 per annum, on the line between Port Moody, in British Columbia, and China and Japan, and \$500,000 per annum on the Atlantic line between Liverpool and St. Johns, New Brunswick. The railroad which forms the connecting link between these two steamer lines, and thus gives a through route from Liverpool to China, has been aided to the extent of \$165,543,600, as stated in the annual report of the Canadian Pacific Railway Company. During the last fiscal year we paid to foreign steamers for carrying our mails \$396,583.81, and to our own steamers only \$109,828.04.

Can there be any doubt how these unequal contests will end if our Government maintains its position of supine indifference?

The evil and its cause are both apparent. What is the remedy? It can not be found in a re-enactment of the legislation of 1789, because

treaties stand in the way, and it would not now be expedient, even if we had no treaties on the subject.

Granting American registers to foreign-built ships, for foreign trade, would have but little effect, and besides it would not be in harmony with the principle of protection to American industries.

The difficulty is not so much in the cost of building ships as in running them in competition with cheap foreign labor supplemented by immense foreign bounties. So far as materials for ship-building are concerned, no nation has any natural advantages over us. Our iron, coal, and timber are as cheap, abundant, and accessible as in any other country. Our mechanics are unsurpassed in skill, and the matchless genius of our inventors is the admiration of the world. If it costs somewhat more to build a ship in this country than in Europe, because American labor is better paid, fed, housed, and clothed, it is a cause for rejoicing rather than regret. If ship-building will not command the labor of our people, as other industries do, it is because that industry, being wholly unprotected, has gone into foreign hands, while the beneficent American policy of protection has been thrown around our other industries. The same policy wisely applied to ship-building and shipping interests would produce like results as in our manufacturing industries. This statement is illustrated and confirmed by our internal and coastwise trade, which is thoroughly protected, and hence in a most prosperous and satisfactory condition. While the number of vessels engaged in this trade has rapidly increased, the cost of transportation has decreased, until our lake, river, and coastwise commerce is conducted as cheaply as is like commerce in any part of the world.

The causes of prosperity in our domestic shipping interests, and the causes which have brought our foreign merchant marine to its present deplorable and humiliating condition, clearly indicate the remedy necessary for the restoration of the latter.

Firmly convinced that American steamship builders and owners can not unaided compete with the Governments of Europe; that without proper aid and encouragement from the United States, we shall not only fail to regain our lost foreign carrying trade, but even to retain much longer the small remnant that remains, and that the restoration of our merchant marine is essential to the extension of our foreign trade, I do not hesitate to recommend that liberal and judicious aid and encouragement be given for the construction of steam merchant vessels, suitable for use as cruisers and transports in time of war; that fair and liberal rates be paid to American steamers for transportation of mails to foreign countries; and that special aid, either in the form

of mail pay, or for mileage run, be made for the establishment of direct connection by American steamer lines with Mexico, Central and South America, and with China and Japan.

TRADE WITH CENTRAL AND SOUTH AMERICA.

The records of the Bureau of Statistics contain certain particulars of the trade of the countries upon this continent southward of the United States, from which the following summaries are taken, it being first mentioned that in numerous instances it has not been practicable to obtain information of later date than the calendar year 1887: The total estimated imports into Central and South America, including Mexico, and the West Indies for 1887, including movements of specie, were \$522,000,000, of which only \$80,000,000, or about 15 per cent., came from the United States. The total estimated exports, including specie, were \$564,000,000, whereof \$202,000,000, or 36 per cent., were taken by the United States. The duties collected upon these imports are estimated at \$59,134,011, of which \$42,117,694 were paid by sugar, \$4,035,928 by tobacco, and \$659,194 by raw wool.

The dutiable imports from those countries consist mainly of sugar and molasses, tobacco, fruits, and wool, and the free importations are nearly all raw materials required by manufactures in the United States.

The principal exports to those countries from the United States are breadstuffs, provisions, lumber, and mineral oils, but an appreciable export trade is maintained in iron and steel manufactures, cotton prints, leather goods, agricultural implements, carriages and railway cars, though the great bulk of manufactured articles are supplied by Great Britain, France, and Germany.

Excluding specie, and estimating from the trade returns of the fiscal year 1888, Mexico imported \$43,380,000, whereof \$19,226,221 were from the United States; Central America \$15,800,285, whereof \$4,592,080 were from the United States; South America \$364,838,005, whereof \$29,579,227 were from the United States, and the West Indies \$97,542,820, whereof \$7,869,102 were from the United States. These figures show a most unsatisfactory condition of our export trade with the South American group of States. Particular mention might be made of such marts of commerce as Brazil, with \$114,335,676 of imports, and only \$7,137,008 from the United States; the Argentine Republic, with \$113,244,801, whereof only \$6,643,553 came from the United States, and Chili, with \$62,677,831 of imports, and only \$2,433,221 from the United States. Reference is made to the appendix for information in detail upon this very interesting subject.

EXPORTATIONS BY RAILWAY.

Provision should be made by law giving authority to the Secretary of the Treasury to prescribe regulations for the collection of statistics of exports from the United States by railway. Section 337 of the Revised Statutes embodies a provision which has been in force since the year 1820, for the obtaining of the particulars of exportation by vessels, but while it is equally important that the statistics of land exportation should be collected, the mode of collection would necessarily be different, and could best be fixed by administrative regulation. The governments of Canada and Mexico obtain and publish statistics of the exports of those countries by railway, and appear to encounter no special difficulty in so doing. What is possible and desirable for them is equally possible and desirable for us. Any statute passed upon the subject should contain a penalty for failure of the carrier to make a return of exportations in such form as may be prescribed by regulation.

SILVER.

The continued coinage of the silver dollar, at a constantly increasing monthly quota, is a disturbing element in the otherwise excellent financial condition of the country, and a positive hindrance to any international agreement looking to the free coinage of both metals at a fixed ratio.

Mandatory purchases by the Government of stated quantities of silver, and mandatory coinage of the same into full legal-tender dollars, are an unprecedented anomaly, and have proved futile, not only in restoring the value of silver, but even in staying the downward price of that metal.

Since the passage of the act of February 28, 1878, to November 1, 1889, there have been purchased 299,889,416.11 standard ounces of silver, at a cost of \$286,930,633.64, from which there have been coined 343,638,001 standard silver dollars.

There were in circulation on November 1 of the present year 60,098,480 silver dollars, less than \$1 per capita, the remainder, 283,539,521, being stored away in Government vaults, of which \$277,319,944 were covered by outstanding certificates.

The price of silver, on March 1, 1878, was 54½ pence, equal to \$1.20129 per ounce fine. At this price \$2,000,000 would purchase 1,660,729 ounces of fine silver, which would coin 2,147,205 standard silver dollars. At the average price of silver for the fiscal year ended

June 30, 1889 (42.499 pence), equivalent to \$0.93163 per ounce fine, \$2,000,000 would purchase 2,146,775 fine ounces, out of which 2,775,628 standard silver dollars could be coined.

The lower the price of silver, the greater the quantity that must be purchased, and the larger the number of silver dollars to be coined, to comply with the act of February 28, 1878.

No proper effort has been spared by the Treasury Department to put in circulation the dollars coined under this law. They have been shipped, upon demand, from the mints and sub-treasuries, free of charge, to the nearest and the most distant localities in the United States, only to find their way back into Treasury vaults in payment of Government dues and taxes. Surely the stock of these dollars which can perform any useful function as a circulating medium must soon be reached, if it has not been already, and the further coinage and storage of them will then become a waste of public money and a burden upon the Treasury.

It is freely admitted that the predictions of many of our wisest financiers, as to when the safe limit of silver coinage would be reached, have not been fulfilled, but it is believed that the principles on which their apprehensions were based are justified by the laws of trade and finance, and by the universal experience of mankind. While many favorable causes have co-operated to postpone the evil effects which are sure to follow the excessive issue of an overvalued coin, the danger none the less exists.

The silver dollar has been maintained at par with gold, the monetary unit, mainly by the provisions of law which make it a full legal tender, and its representative, the silver certificate, receivable for customs and other dues; but the vacuum created by the retirement of national-bank circulation, and the policy of the Government in not forcibly paying out silver, but leaving its acceptance largely to the creditor, have materially aided its free circulation.

The extraordinary growth of this country in population and wealth, the unprecedented development in all kinds of business, and the unswerving confidence of the people in the good faith and financial condition of our Government, have been powerful influences in enabling us to maintain a depreciated and constantly depreciating dollar at par with our gold coins, far beyond the limit which was believed possible a few years ago.

But the fact must not be overlooked that it is only in domestic trade that this parity has been retained; in foreign trade the silver dollar possesses only a bullion value.

Causes of the depreciation of silver.

From the year 1717 to 1873 the ratio between gold and silver was remarkably constant, being 15.13 to 1, in the former year, and 15.92 to 1 in the latter year. During this long period of one hundred and fifty years there were slight fluctuations in the ratio, but not enough to cause any serious inconvenience. Even during the period of the immense production of gold, from 1848 to 1868, when \$2,757,000,000 of gold was produced and only \$813,000,000 of silver, the change in the ratio was only about 1.6 per cent.

The legislation of Germany in 1871-'73, immediately following the Franco-German war, adopting the single gold standard for that Empire, withdrawing rapidly from circulation silver coins which prior to that time had formed almost exclusively the circulating medium, and throwing large quantities of silver at short and uncertain intervals upon the market, was the initial factor of the great monetary disturbance which destroyed the legal ratio between gold and silver that had existed for half a century.

France and her monetary allies, Belgium, Switzerland, Italy, and Greece, alarmed at the immense stock of German silver which was sure to flow into their open mints, immediately restricted, and soon afterward closed their mints to the coinage of full legal-tender silver pieces.

This action only hastened the catastrophe.

The other nations of Europe were not slow to follow the example of Germany and France. In 1873-'75 Denmark, Norway and Sweden adopted the single gold standard, making silver subsidiary. In 1875 Holland closed her mints to the coinage of silver. In 1876 Russia suspended the coinage of silver, except for use in the Chinese trade. In 1879 Austria-Hungary ceased to coin silver for individuals, except a trade coin known as the Levant thaler.

The result has been, that while prior to 1871 England and Portugal were the only nations of Europe which excluded silver as full legal-tender money; since the monetary disturbance of 1873-'78 not a mint of Europe has been open to the coinage of silver for individuals.

It has been charged that the act of February 12, 1873, revising the coinage system of the United States, by failing to provide for the coinage of the silver dollar, had much to do with the disturbance in the value of silver. As a matter of fact the act of 1873 had little or no effect upon the price of silver. The United States was at that time on a paper basis. The entire number of silver dollars coined in this country from the organization of the Mint in 1792, to that date, was only 8,045,838, and they had not been in circulation for over twenty-five years.

Moreover, immediately upon the passage of that act, the United States entered the market as a large purchaser of silver for subsidiary coinage, to take the place of fractional paper currency, and from 1873 to 1876 purchased for that coinage 31,603,905.87 standard ounces of silver, at a cost of \$37,571,148.04.

Starting in 1878 with no stock of silver dollars, this country, standing alone of all important nations, in its efforts to restore the former equilibrium between gold and silver, has, in the brief period of eleven years, added to its stock of full legal-tender money 343,638,001 dollars of a depreciated and steadily depreciating metal.

What has been the effect upon the price of silver?

The value of an ounce of fine silver, which on March 1, 1878, was \$1.20, was on November 1, 1889, \$0.95, a decline in eleven years of over 20 per cent.

In 1873, the date at which purchase of silver for subsidiary coinage commenced, the bullion value of the silver dollar, containing 371.25 grains of pure silver, was about 1½ cents more than the gold dollar; on March 1, 1878, the date of the commencement of purchases for the silver dollar coinage, it was \$0.93, while to day its bullion value is 72 cents in gold. In other words, there has been a fall of over 28 per cent. in the value of silver as compared with gold in the last sixteen years, and of over 20 per cent. since we commenced purchases in 1878. The downward movement of silver has been continuous, and with uniformly accelerated velocity, as will appear from the following table:

Average price of silver in London each fiscal year, 1873-1889, and value of an ounce of fine silver, at par of exchange, with decline expressed in percentages each year since 1873.

Year.	Price in London.	Value of a fine ounce.	Decline from 1873.
	<i>d.</i>	<i>Dollars.</i>	<i>Per cent.</i>
1873.....	59.2500	1.23883	.....
1874.....	58.3125	1.27827	1.6
1875.....	56.8750	1.24676	4.
1876.....	52.7500	1.15634	11.
1877.....	54.8125	1.20156	7.5
1878.....	54.3107	1.19050	8.3
1879.....	50.8125	1.11387	14.2
1880.....	52.4375	1.14954	11.5
1881.....	51.9375	1.13852	12.3
1882.....	51.8125	1.13623	12.5
1883.....	51.0230	1.11826	13.9
1884.....	50.7910	1.11339	14.3
1885.....	49.8430	1.09262	15.9
1886.....	47.0380	1.03112	20.6
1887.....	44.8430	.98301	24.3
1888.....	43.6750	.95741	26.3
1889.....	42.4990	.93163	28.3

Indian council bills.

In view of the almost unanimous concurrence of the leading commercial nations of the world in excluding silver from coinage as full legal-

tender money, it would seem unnecessary to look further for the causes of its depreciation, despite the large purchases upon the part of this Government. There has, however, been one cause, which probably more than any other, except hostile legislation, has depressed the market value of silver, namely, the sale of Indian council bills.

About 1867 a diminution in the flow of silver to the east was clearly marked. This was due to the use of bills of exchange, called "council bills," sold by the India Council of the Government of India residing in London. These bills of exchange, which are claims for certain sums of silver, are bought by merchants wishing to make payments in India, silver being the standard and only legal tender in that empire; so that just as the expenses of the Indian government rose, and, in consequence, the number of council bills offered for sale in London increased, the exportation of silver to India was saved.

In 1868-'69, the sale of these bills amounted to £3,705,741, in round numbers \$18,000,000, whereas in 1888-'89 there was realized from the sale of these bills £14,223,433, about \$70,000,000.

In some years their sale has risen as high as \$90,000,000.

The average amount realized annually from the sale of council bills, for the fifteen English official years, 1875-1889, has been £13,756,882, or \$67,000,000, while the annual shipments of silver to India for the same period, have averaged £7,176,446, or \$35,000,000.

The following table exhibits the net imports of silver into India, and the amount realized from the sale of Indian council bills, each year, from 1875 to 1889:

Table showing the net imports of silver into British India, and the amount of council bills sold, during the fifteen English official years (ending March 31 of each year) 1874-'75 to 1888-'89.

Years.	Net imports of silver.	Amount of council bills sold.
1874-'75.....	£4,640,000	£10,841,614
1875-'76.....	1,550,000	12,389,613
1876-'77.....	7,200,000	12,695,799
1877-'78.....	14,680,000	10,134,455
1878-'79.....	3,970,000	13,948,565
1879-'80.....	7,870,000	15,261,810
1880-'81.....	3,890,000	15,239,677
1881-'82.....	5,380,000	13,412,429
1882-'83.....	7,480,000	15,120,521
1883-'84.....	6,410,000	17,599,805
1884-'85.....	7,250,000	13,758,909
1885-'86.....	11,610,000	10,523,505
1886-'87.....	7,160,000	11,157,213
1887-'88.....	9,310,000	15,045,883
1888-'89.....	9,247,000	14,223,433
Total.....	107,647,000	206,353,231
Annual average.....	7,176,466	13,756,882

These \$50,000,000 to \$90,000,000 of council bills, payable in silver, annually thrown upon the market affect the price of silver as would the sale of so much bullion. That these council bills hang like an incubus upon the price of silver can not be doubted, and they must enter largely into any inquiry as to the causes of depreciation, and into any estimate of the probable advance of that metal.

Increased product.

While the demand for silver has been cut off by the closing of the mints of Europe to its coinage, and the usual demand upon the part of India reduced by the sale of council bills, the annual product of silver has largely increased.

The world's product of silver in 1878 was estimated at \$95,000,000 (coining value), of which \$15,200,000 was the product of the United States. In 1888 the world's product of silver was estimated at \$142,000,000 (coining value), of which the United States contributed \$59,195,000. These figures show an increase during the last decade in the world's product of silver of about 50 per cent., and an increase in the silver product of the United States of over 30 per cent.

In view of these facts, while it is evident that the primary cause of the decline in the price of silver was adverse legislation by the principal countries of Europe, virtually ostracising silver, it is also true that the fall has been hastened by an increased supply falling upon a market for which there was a reduced demand.

Royal Commission.

The Royal Commission, appointed by the British Government in 1886 to inquire into the recent changes in the relative value of the precious metals, adopted the following statement, without division:

We are of opinion that the true explanation of the phenomena which we are directed to investigate is to be found in a combination of causes, and can not be attributed to any one cause alone. The action of the Latin Union in 1873 broke the link between silver and gold, which had kept the price of the former, as measured by the latter, constant at about the legal ratio, and when this link was broken the silver market was open to the influence of all the factors which go to affect the price of a commodity. These factors happen, since 1873, to have operated in the direction of a fall in the gold price of that metal, and the frequent fluctuations in its value are accounted for by the fact that the market has become fully sensitive to the other influences to which we have called attention above.

Joint use of gold and silver as money.

It is unquestionably true that, in this country, public sentiment and commercial and industrial necessity demand the joint use of both metals as money. It is not proposed to abandon the use of either gold or silver money; the utilization of both metals as a circulating medium and as a basis for paper currency, is believed to be essential to our national prosperity. We can not discard either if we would without invoking the most serious consequences. But the unprecedented change in the market value of the two metals within the last sixteen years, and the steady depreciation of silver in the face of the large purchases on the part of this Government, arouse grave apprehensions and cause great difficulties.

With a stock of 343,638,001 silver dollars, sharing equally with our gold coins the function of full legal-tender money, as well as \$76,600,000 silver coins of limited tender, and an annual product of silver from our mines, approximating \$60,000,000 (coining value), it would not be for the interests of this growing country, nor would it be wise public policy, to discontinue the use of either metal as money. Yet it is equally true that two widely different and constantly varying standards, for the measurement of values, are impossible in any permanent, well ordered, financial system.

While our circulation now embraces gold and silver coin and four kinds of paper money, there is in reality, since 1873, but one standard. Section 3511, Revised Statutes, provides that "the gold coins of the United States shall be a one dollar piece, which at the standard weight of 25.8 grains shall be the *unit of value*." * * * Our legal-tender notes have behind them, in the vaults of the Treasury, a reserve of \$100,000,000 in gold provided as a guarantee for their redemption. Our bank currency is based upon United States bonds, the principal and interest of which are payable in gold. Our gold certificates are expressly made redeemable in gold coin.

It may be said that our standard silver dollars, and the certificates based upon them, constitute an exception. They are an anomaly, the *standard* is nominally silver, but in reality it is gold. The bullion from which these dollars are coined is purchased at its market price in gold. They are made a legal tender, and are receivable for customs and other dues. The faith and power of the Government are, therefore, pledged to make them equal to their face value; and so long as their number is kept within safe and proper limits they will, in this country, at least, be maintained at par with gold. The honor, as well as the interests of the country, are involved in the preservation of this parity.

Equivalence between our gold and silver dollar in foreign trade is impossible at the present price of silver, but equivalence in domestic trade is practicable so long as the coinage of the silver dollar is kept within proper limits.

Up to this time they have been maintained at par by force of governmental authority, and by the confidence of the people in the good faith and financial power of the United States. Gold is the real standard for the measurement of values, and will remain so until supplanted by its great rival, silver; or until some international agreement shall be entered into between Governments strong enough to establish and maintain a fair ratio of value between the two metals.

Force applied through legislative action may for a time control the laws of trade, but eventually, those laws, stronger than legislators, will assert their power.

There are doubtless persons who would banish silver from circulation and rely wholly upon gold, while others would make silver the only standard and by adopting the cheaper metal drive the dearer out of circulation, if not out of the country; but an overwhelming preponderance of public sentiment demands that both metals be utilized.

The problem, therefore, presented for our consideration, and which demands the action of Congress, is not which metal shall we use, but, "*How shall we use both?*"

Solutions which have been proposed.

Various solutions of this problem have been proposed, among which the following may be mentioned:

First. An international agreement fixing a ratio between silver and gold, and opening the mints of the leading nations of the world to the free coinage of both metals, at the ratio so established.

In such concert of action, if it could be secured, is the final and satisfactory solution of the silver problem. The policy of promoting it was instituted by the United States in 1878. The proposition was made to the European nations, and was fully set forth and justified in two International Conferences. Unfortunately, some of the most powerful nations are not yet ready to act. Public sentiment, even in those countries, seems to be steadily moving in that direction, but thus far no substantial results have been achieved.

It is believed by many persons, well informed on the subject, that eventually the evils and embarrassments of the present condition of affairs will become so intolerable, as to force the most reluctant nations into an agreement for the remonetization of silver upon some fair

ratio. It has been proposed, by persons of the highest financial standing, to hasten this result, by stopping the purchase of silver by the United States, and by throwing an additional 30,000,000 ounces annually upon the market, to precipitate so sudden and great a fall in its price as to create serious financial disturbance throughout the world, and thus compel a speedy international adjustment of the silver question. This policy might prove the shortest way of reaching the desired result, but it would probably be attended by commercial and industrial disasters in this country as well as abroad, which conservative statesmanship should seek to avoid. Some other less dangerous solution should be found if possible. The modification of this proposal, fixing a date in the future for suspension in case no co-operation in the maintenance of silver on the part of other nations should be forthcoming, reduces the danger, but does not entirely remove it.

Second. The present policy of purchasing and coining \$2,000,000 worth of silver per month.

This is now approved by nobody.

The so-called silver men oppose it, because it does not go far enough to meet their wishes; opponents of silver coinage denounce it, because they deem it unwise and dangerous to increase the issue of a coin whose nominal value is far in excess of its bullion value.

Third. Increased purchases and coinage of silver to the maximum of \$4,000,000 worth per month, now authorized by law.

This policy is proposed by many as a means of increasing our circulation, which they assert is deficient by reason of the retirement of national-bank notes; and also as a means of enhancing the value of silver by absorbing the world's surplus product. Both of these objects may be far better secured, as will be shown hereafter, by another method which possesses all the advantages of increased coinage, and involves none of its dangers.

The argument has been strongly urged that by reason of the rapid retirement of national-bank notes, a severe contraction of our currency has been effected, which is paralyzing our industries, crippling our commerce, and depressing the price of all kinds of property. The facts, however, do not sustain this argument.

Since March 1, 1878, there has been no contraction, but on the contrary a very large expansion of our currency, as will appear from the following statement taken from the books of the Treasury:

Comparison between March 1, 1878, and October 1, 1889.

	In circulation March 1, 1878.	In circulation October 1, 1889.	Decrease.	Increase.
Gold coin.....	\$82,530,163	\$375,947,715		\$293,417,552
Standard silver dollars.....		57,554,100		57,554,100
Subsidiary silver.....	53,573,833	52,931,352	\$642,481	
Gold certificates.....	44,364,100	116,675,349		72,311,249
Silver certificates.....		276,619,715		276,619,715
United States notes.....	311,436,971	325,510,758		14,073,787
National-bank notes.....	317,888,740	199,779,011	114,109,729	
Totals.....	805,793,807	1,405,018,000	114,752,210	713,976,403
Net increase.....				599,224,193

From the above statement it will be seen that the—

Total increase of circulation of all kinds has been **\$713,976,403**

Total decrease..... **114,752,210**

Net increase..... **599,224,193**

The net expansion since March 1, 1878, has, therefore, been \$599,224,193. The average net increase per month has been \$4,342,204, \$52,106,451 per annum. The total net increase has been a little over 74 per cent., while the increase in population has been about 33 per cent. In 1878 the circulation was about \$16.50 per capita, and in 1889 it was about \$21.75 per capita.

The increase each year, in the different kinds of money, is exhibited in the following table:

The amount and kinds of money in actual circulation on certain dates from 1878 to 1889.

Year.	Date.	Total circulation.	Gold coin.	Standard silver dollars.	Subsidiary silver.
1878.....	March 1.....	\$805,793,807	\$82,530,163		\$53,573,833
1879.....	October 1.....	862,579,734	123,698,157	\$11,074,230	54,088,747
1880.....	October 1.....	1,022,033,685	261,320,920	22,914,075	48,368,543
1881.....	October 1.....	1,147,892,435	323,118,146	32,230,038	47,859,327
1882.....	October 1.....	1,188,752,363	358,351,956	33,801,231	47,153,750
1883.....	October 1.....	1,236,650,032	346,077,784	39,783,527	48,170,263
1884.....	October 1.....	1,261,569,924	341,485,840	40,322,042	45,344,717
1885.....	October 1.....	1,286,630,871	348,268,740	45,275,710	51,328,206
1886.....	October 1.....	1,264,889,561	364,894,599	60,170,793	48,176,838
1887.....	October 1.....	1,353,485,690	391,090,890	60,614,524	50,414,706
1888.....	October 1.....	1,384,340,280	377,829,865	57,959,356	52,020,975
1889.....	October 1.....	1,405,018,000	375,947,715	57,554,100	52,931,352

Year.	Date.	Gold certificates.	Silver certificates.	United States notes.*	National bank notes.
1878.....	March 1.....	\$44,364,100		\$311,436,971	\$313,888,740
1879.....	October 1.....	14,843,200	\$1,176,720	327,747,762	329,950,938
1880.....	October 1.....	7,480,100	12,203,191	329,417,403	340,329,453
1881.....	October 1.....	5,239,320	52,590,180	327,655,384	354,199,540
1882.....	October 1.....	4,907,440	63,204,780	325,272,858	356,060,348
1883.....	October 1.....	55,014,940	78,921,961	321,356,596	347,324,961
1884.....	October 1.....	87,389,660	96,491,251	325,786,143	324,750,271
1885.....	October 1.....	118,137,790	93,656,716	318,736,684	311,227,025
1886.....	October 1.....	84,691,807	95,387,112	310,161,935	301,406,477
1887.....	October 1.....	97,984,683	154,354,826	329,070,804	269,955,257
1888.....	October 1.....	134,838,190	218,561,601	306,052,053	237,578,240
1889.....	October 1.....	116,675,349	276,619,715	325,510,758	199,779,011

*Includes outstanding clearing-house certificates of the act of June 8, 1872.

The statement, therefore, that this country is suffering a paralysis from severe contraction, does not seem to be sound, nor do the facts appear to justify a largely increased coinage of silver dollars for the purpose of expanding the currency.

As to the other proposition, that increased coinage would enhance the value of silver by absorbing the world's surplus product, it is a matter of grave doubt whether the purchase of an additional \$2,000,000 worth of silver per month would have the effect of materially and permanently increasing the price of silver. That an increase of price would temporarily occur, if this Government should adopt such a policy seems probable, but whether it would be maintained is a matter of conjecture—dependent upon conditions which no one can foresee.

If the purchase of 299,889,416 ounces of silver, in the brief period of eleven years, did not even stay the downward tendency in price, but in the face of this immense quantity purchased, silver declined over 20 per cent. in value, what assurance have we that doubling the amount to be purchased and coined would materially and permanently enhance the price of silver, much less restore the former equilibrium?

Such a policy would on the other hand be attended by great dangers, and would widen the gap between the legal ratio in coinage of this country and European countries, and thus increase the difficulties in the way of an international settlement. Every silver dollar coined at the ratio of 16 to 1 (actually 15.98 to 1) is an additional obstacle in the way of the adoption of any practical ratio by international agreement, which is the only final solution of the silver question. For this reason, if for no other, future accumulations of silver should be only in the form of bullion.

The purchase of \$4,000,000 worth of silver a month, at the present price of silver, would mean the coinage of 5,600,000 silver dollars monthly, to be stored away in Treasury vaults. It may be said that certificates would be issued on these dollars, and that they would be a popular form of currency, but the fact is, that at no time since the coinage of the silver dollar was commenced, has the full amount of silver dollars held by the Treasury been covered by outstanding certificates. The substitution of the silver certificate for the cumbersome and inconvenient silver dollar, while it has tended to popularize it, and give it a circulation otherwise impossible, and to extend its usefulness, and postpone the evil day so often prophesied, has added nothing to its value, and has relieved the dollar from none of the dangers inherent in the effort to keep an overvalued coin at par with gold. These certificates rather add to the perils of such a financial policy by temporarily

popularizing it, and by increasing and intensifying, through postponement, the evil results which inevitably await upon its enlargement and continuance.

The coinage of 5,600,000 silver dollars a month would tax the present mint organization to its utmost capacity, and would practically suspend the coinage of gold. True, this might be obviated by enlarged facilities, but as the coinage of \$2,000,000 worth a month has more than met the demand for certificates, the argument that this additional coinage would soon be owned by the people in the shape of certificates, is not sustained by the history of the past nor by the demands of the present.

If the issue of silver dollars, or the certificates which represent them, should become so numerous as to endanger the free circulation of gold, and its representatives, gold certificates and legal-tender notes, the dues of the Government would soon be paid in silver; and as heretofore the interest and principal of the obligations of the Government have been paid in gold, it would only be a question of time when the specie reserve in the Treasury would change from gold to silver to such an extent as to force the Secretary to pay out silver. Just so long as the Government does not forcibly pay out silver, but leaves its acceptance to the option of the creditor, no one is forced to receive it unless he thinks he can dispose of it at its face value; and in this way the number of silver dollars in circulation is limited to actual requirements. But if more than sufficient to satisfy business needs are issued, they accumulate in the hands of merchants and in banks, and, unless the Government redeems them, they must depreciate.

The Secretary of the Treasury, in whom is lodged the discretionary power to purchase and coin \$4,000,000 worth of silver per month, concurs in the opinion of all his predecessors since 1878, of both political parties, that there is a limit beyond which it is not safe to go in the coinage of full legal-tender dollars, the nominal value of which is far in excess of the bullion value, and he has therefore confined his purchases to the amount required by law.

Fourth. Free coinage of standard silver dollars.

This may be called the "heroic" remedy. To open our mints to free coinage for depositors, when 412½ grains of standard silver are worth in the markets of the world only 72 cents, would be to say to everybody at home and abroad, bring us 72 cents worth of silver, and by the magic of our stamps and dies we will transmute it into 100 cents.

Free coinage of silver, while it is an indispensable condition of permanent restoration, were it bestowed by this country at a time when

the metal value of the silver in the full legal-tender dollar is 28 cents less than its nominal value, would simply have the effect, by opening the mints to the free coinage of silver into legal dollars, to close them for the free coinage of gold. No doubt our mints would find ample employment. If they were now open to the free coinage of silver, we should not need them for the coinage of gold, because gold would command a premium and become a commodity to be hoarded or shipped abroad, and not a coin for circulation at home. It would stop the simultaneous circulation of gold and silver. Our customs dues would be paid only in silver, our legal-tender notes would be used to draw the gold from the Treasury, and would then represent only a debt in silver, and we should be compelled to go into the market and purchase gold to meet our obligations, or pay them in silver dollars. Rich and powerful as the United States is, we are not strong enough, nor rich enough, to absorb the silver of the world, without placing our country wholly upon the Asiatic silver basis. This policy would in no wise tend to restore the desired equilibrium between gold and silver nor to promote their joint use as money.

Nor would it meet the hopes and expectations of those who desire an increase of our circulating medium.

The amount of gold and gold certificates owned by the people and in actual circulation, exclusive of \$187,572,386 owned by the Treasury on November 1, 1889, was \$496,622,300. Free coinage of silver dollars would, as already stated, very soon put this large amount of gold at a premium, and cause it to be hoarded or exported, and thus retire it from circulation.

Even if we should coin 100,000,000 standard silver dollars a year, it would be five years before enough of them could be put in circulation to equal the gold thus banished, and by the time 500,000,000 silver dollars, in addition to our present stock, could be circulated, their depreciation from the gold standard might require one or two hundred millions more to do the same amount of work now done by gold.

It is difficult to conceive of a method by which a more swift and disastrous contraction of our currency could be produced.

It is within the memory of all that for several years prior to 1879 gold was not in circulation as money, but, when resumption took place, the hidden treasures, which had so long been banished from actual use, at once flowed into the channels of business and produced the most substantial and satisfactory conditions of prosperity.

The free coinage of silver dollars, under existing circumstances, would be to reverse the results achieved by resumption.

Fifth. The coinage of silver dollars containing a dollar's worth of bullion.

This has been with many a favorite solution of the problem under discussion. They say "We have no objection to the coinage of silver if you will only make an honest dollar, by putting into it enough silver to make it equal in value to a gold dollar."

This proposition, while apparently "honest," is thoroughly impracticable and impolitic.

As the price of silver varies almost daily, the amount of silver to be put into the silver dollar, to make it of equal value to the gold dollar, would have to be changed constantly. While the divergence between the dollar of gold and the dollar of silver would not be so great, the relative value of the two dollars would, in reality, be as fluctuating and uncertain as it is now. The present silver dollar is inconveniently large and heavy for actual use as money, and to increase its weight from 412½ to 556 grains (which at the present price of silver would be the equivalent of the gold dollar), that is, to increase its bulk 35 per cent., would make it simply intolerable.

Another objection is that the coinage of a heavier dollar would be a new obstruction to any international ratio.

The paramount objection to this plan, however, is that it would have a decided tendency to prevent any rise in the value of silver. Seizing it at its present low price, the law would in effect declare that it must remain there forever, so far as its uses for coinage are concerned.

Sixth. Issue certificates to depositors of silver bullion at the rate of one dollar for 412½ grains of standard silver.

This proposition is a recognition of the inexpediency of coining silver dollars to pile away in Treasury vaults, while their paper representatives are doing the work of circulation. To this extent it is an improvement on the last four propositions, inasmuch as it would save the useless expense of coinage, and be more convenient for storage. It would also be a step in the way of an international agreement, by stopping further silver coinage at a ratio different from that almost universal in European countries.

This proposition practically amounts to free coinage of silver for depositors, and is open to all the serious objections and dangers which have been urged against that heroic remedy.

Measure recommended.

Issue Treasury notes against deposits of silver bullion at the market price of silver when deposited, payable on demand in such quantities of silver bullion as will equal in value, at the date of presentation, the number of dollars expressed on the face of the notes at the market price of silver, or in gold, at the option of the Government; or in silver dollars at the option of the holder. Repeal the compulsory feature of the present coinage act.

The Secretary desires to call special attention to this proposition, believing that in the application of its principles will be found the safest, surest, and most satisfactory solution of the silver problem as it is now presented for the action of this country.

In explaining the proposed measure, at this time, it is intended to deal only with its general features, but, if desired, a bill embracing the details believed to be necessary to its satisfactory operation will be prepared and submitted for the consideration of Congress.

The proposition is briefly this: To open the mints of the United States to the free deposit of silver, the market value of the same (not to exceed \$1 for 412.5 grains of standard silver) at the time of deposit, to be paid in Treasury notes; said notes to be redeemable in the quantity of silver which could be purchased by the number of dollars expressed on the face of the notes at the time presented for payment, or in gold, at the option of the Government, and to be receivable for customs, taxes, and all public dues; and when so received they may be reissued; and such notes, when held by any national-banking association, shall be counted as part of its lawful reserve.

The Secretary of the Treasury should have discretionary power to suspend, temporarily, the receipt of silver bullion for payment in notes, when necessary to protect the Government against combinations formed for the purpose of giving an arbitrary and fictitious price to silver.

If the price of silver should advance between the date of the issue of a note and its payment, the holder of the note would receive a less quantity of silver than he deposited, but he would receive the exact quantity of silver which could be bought in the market with the number of gold dollars called for by his note, at the date of payment. If the price should decline, he would receive more silver than he deposited, but he would receive the quantity of silver which could be purchased with the number of gold dollars called for by his note at the time he presented it for payment.

The advantages of retaining the option to redeem in gold are three-fold :

First. It would give additional credit to the notes.

Second. It would prevent the withdrawal and redeposit of silver for speculative purposes.

Third. It would afford a convenient method of making change when the weight of silver bars does not correspond with the amount of the notes.

So far as the issue of the notes is concerned, the plan is very simple. If a depositor brings a hundred ounces of silver to the mint, and the market price of silver at that date, as determined by the Secretary of the Treasury, is 95 cents an ounce, he would receive in payment Treasury notes calling for \$95.

Various methods of redeeming the proposed notes have been considered, but the plan recommended seems preferable.

They might be redeemed wholly in silver bullion of the same weight as that deposited; that is to say, if an owner of silver had deposited a hundred ounces, he might receive back a hundred ounces.

The objection to this plan of redemption is that it would subject the notes to all the fluctuations which might occur in the price of silver, and, from lack of steadiness and certainty of value they might not circulate freely as money.

Another plan which has been suggested is to redeem them in lawful money of the United States, dollar for dollar. This is practically a purchase of the bullion at its market price, the Government becoming the owner of it on the issue of the notes. This method has some features which commend it, but on the whole it does not seem logical or desirable that the notes should be redeemed in a currency which is certainly no better, if as good, as themselves. Moreover, it does not seem expedient to pile up in the vaults of the Government a large quantity of silver bullion which can not be made available for the redemption of the very notes which are based upon it. True, the Government might coin the bullion into standard silver dollars and use the resulting coin for the redemption of the notes, which would be quite satisfactory when the silver dollar becomes equal in value to the gold dollar, but at present it would not appear to be either just or desirable to issue a note on a deposit of a hundred cents worth of silver, and redeem it with a dollar containing only 72 cents worth of silver.

Advantages of the proposed measure.

Among the obvious advantages of the measure proposed, the following may be briefly stated :

First. It would establish and maintain through the operations of trade a convenient and economical use of all the money-metal in the country.

Second. It would give us a paper currency not subject to undue or arbitrary inflation or contraction, nor to fluctuating values, but based, dollar for dollar, on bullion at its market price, and having behind it the pledge of the Government to maintain its value at par. It would be as good as gold, and would remain in circulation, as there could be no motive for demanding redemption for the purposes of ordinary business transactions.

Third. By the utilization of silver in this way a market would be provided for the surplus product. This would tend to the rapid enhancement of its value, until a point be reached where we can with safety open our mints to the free coinage of silver.

Fourth. The volume of absolutely sound and perfectly convenient currency thus introduced into the channels of trade would also relieve gold of a part of the work which it would otherwise be required to perform. Both of the causes last mentioned, it is confidently believed, would tend to reduce the difference in value between the two metals and to restore the equilibrium so much desired. It would furnish a perfectly sound currency to take the place of retired national-bank notes, and thus prevent the contraction feared from that source.

Fifth. It would meet the wants of those who desire a larger volume of circulation, by the introduction of a currency, which, being at all times the equivalent of gold, would freely circulate with it, and thus avoid the danger of contraction, which lurks in the policy of increased or free coinage of silver, by reason of the hoarding or exportation of gold.

Sixth. It should not encounter the opposition of those who deprecate inflation, for, though the volume of currency may be somewhat increased, the notes would be limited to the surplus product of silver, and each dollar thus issued would be absolutely sound, and would represent an amount of bullion worth a dollar in gold.

Seventh. It would be far more advantageous to silver producers than increased coinage under existing law, for in both cases bullion would

be paid for at its market value, and under the plan proposed a much larger amount could be used with safety; and while increased coinage would arouse the fears and encounter the opposition of a very large and powerful class of people, it is believed that this measure would meet with their acquiescence.

Eighth. There would be no possibility of loss to the holders of these notes, because in addition to their full face value in bullion they would have behind them the pledged faith of the Government to redeem them in gold, or its equivalent in silver bullion.

Ninth. The adoption of this policy, and the repeal of the compulsory coinage act, would quiet public apprehension in regard to the over-issue of standard silver dollars, and the present stock could therefore be safely maintained at par.

Tenth. This plan could be tried with perfect safety, and it is believed, with advantage to all our interests. Should it prove a successful and satisfactory plan for utilizing silver as money, other nations might find it to their interest to adopt it, without waiting for an international agreement, and should concerted action be deemed desirable, it could then be more readily secured.

By this method it is believed that the way would be paved for the opening of the mints of the world to the free coinage of silver and the restoration of the former equilibrium of the money-metals.

Possible objections and criticisms.

I may here conveniently note and answer in brief some of the objections which may be made to this proposition:

First. Possibility of loss to the Government by a further depreciation in the value of silver bullion.

This danger is exceedingly remote. On the other hand there is every reason to believe that a profit to the Government would be realized by the adoption of this measure. First, from the almost certain rise in the value of the silver on deposit, which would inure to its advantage; and second, from the destruction and permanent loss of notes, which would never be presented for redemption, the bullion represented by them then becoming the property of the Government.

But even if a loss arise by reason of a further decline in the value of silver, this would not be a valid objection to the measure proposed, for the reason that the Government, having assumed control of the currency of the country, is bound, at whatever cost, to supply a

circulating medium which is absolutely sound. This duty has been fully recognized in the case of our legal-tender notes, by the sale of four and four-and-a-half per cent. bonds, amounting to \$95,500,000, in order to provide that amount of gold, which now lies in the Treasury, as a reserve for their redemption. We have already paid out over \$40,000,000 interest on these bonds, as a portion of the cost of maintaining the outstanding \$346,000,000 of United States notes, and we are still paying over \$4,000,000 a year for that purpose.

Second. It might be suggested that to issue Treasury notes on unlimited deposits of bullion would place the Government at the mercy of combinations organized to arbitrarily put up the price of silver for the purpose of unloading on the Treasury at a fictitious value.

This danger may be averted by giving the Secretary of the Treasury discretion to suspend temporarily the receipt of silver and issue of notes in the event of such a combination, and he might be authorized, under proper restrictions, to sell silver, if necessary, retaining the gold proceeds for the redemption of the notes.

The existence of such authority, even if never exercised, would prevent the formation of any effectual combination of this kind, for the reason that a combination to control the silver product of the world would be very expensive, requiring immense capital, and could not be successfully undertaken in the face of the power lodged with the Secretary to defeat it.

This method of guarding against combinations and corners would be far better than the proposition to fix the price at which notes should be issued, at the average price of silver during any considerable antecedent period of time, as the latter would tend to prevent the normal rise in value, which is desired and anticipated from the adoption of this method.

Third. If it be objected to on the ground that it would degrade silver from its position as money, and reduce it to the level of a mere commodity, the reply is that silver bullion is now a mere commodity.

This policy would at once give to silver, through its paper representative, the rank and dignity of money in the most convenient and least expensive way in which it can possibly be utilized. The issue of notes based on bullion, as proposed, would have the effect of crowning it with the dignity of money as effectually as could the dies and stamps of a United States mint. Instead of degrading silver, this plan would tend to restore it to its former ratio with gold.

Fourth. It might be urged against this plan that it would open a tempting field for speculation by offering to speculators an opportunity,

when silver had temporarily fallen but was likely to advance, to withdraw from the Treasury and hold for a rise the silver bullion covered by notes; or, when there might be a possibility of a depression, to deposit it, wait for a fall in price, and then have their notes redeemed in an increased quantity of silver.

The answer to this objection is that the danger is by no means great, but should it prove so, the judicious exercise by the Secretary of the Treasury of his option to redeem in gold (either coin, bullion, or certificates), would effectually prevent the successful culmination of such speculative operations.

Fifth. Unless the amount of silver bullion be limited, may not this policy result in an undue and dangerous increase in the volume of our currency? May we not be flooded with the world's excess of silver?

Fears of too large a volume of absolutely sound currency are not entertained to any considerable extent by our people. The dangers from such an expansion are not apparent, nor are they serious. It is only inflation from overissue of doubtful or depreciated dollars that affords substantial grounds for apprehension.

As to the objection that we may be flooded with the world's silver, the proposed law itself, and the statistics in regard to the present product and the uses of silver, furnish a complete reply. Treasury notes would only be issued at the average price of silver in the leading financial centers of Europe and the United States, so that there could be no possible motive for shipping it from abroad. Why should any one pay the cost of transporting silver from Europe to exchange for our Treasury notes at the same price it would command in gold at home? Probably we should receive some of the surplus product of Mexico; but, as will be presently shown, the amount would not be dangerously large. It would not come from South America, because it would command the same price in gold in London that it would in notes in New York, and nearly all the product of South America goes, in the shape of miscellaneous ores and base bars, to Europe for economical refining.

As the last objection raised is of vital importance, it may properly be considered somewhat in detail.

The silver product of the world, for the calendar year 1888, was estimated to have been approximately 110,000,000 ounces, divided among producing countries as follows:

Countries—	Fine ounces.
United States.....	45,800,000
Mexico	32,000,000
South America.....	17,000,000
Europe	10,000,000
Australia and Japan.....	5,200,000
Total.....	110,000,000

The commercial value of the above product, based upon the average price of silver for the same year (94 cents an ounce), was \$103,400,000, and the coining value \$142,000,000.

It is necessary to use the coining value in this connection, because it is proposed to deal with *coinages* which are usually reported at their nominal value.

The silver coinages of the world, officially reported to the Director of the Mint, through our foreign representatives, for the year 1888, aggregated \$149,737,442.

Included in this aggregate are 26,658,964 Mexican dollars, and the sum of \$28,000,000 officially reported as recoinages, that is, domestic or foreign coins remelted during the year. What amount of old jewelry, plate, etc., was used for coinage purposes is not known, aside from the United States.

Deducting the coinage of Mexican dollars and the amount of the recoinages, say \$54,000,000, leaves the amount of new silver employed in coinage about \$95,000,000.

The new silver used in coinage in 1888 was approximately distributed as follows:

<i>Coinage (less recoinage) 1888.</i>	
Countries—	Coining value.
By the United States	\$32, 300, 000
By India.....	35, 000, 000
By Japan	10, 000, 000
By other countries (principally colonial and subsidiary coinages).....	17, 700, 000
Total.....	95, 000, 000

The product of new silver for the same year was, approximately, \$142,000,000 (coining value), leaving about \$47,000,000 of new silver for use in the arts and industries, for Mexican coinage not remelted, and unaccounted for.

Deducting for recoinages—that is, for domestic and foreign coins used over, say \$4,000,000—the value of the new silver used annually in coinage by the United States and India may be placed at \$67,000,000.

Since the suspension of silver coinage by the states of the Latin Union in 1875, the only nations which have executed full legal-tender silver coinages of any considerable value have been the United States and India. While it is true that the mints of Mexico have been open to the coinage of full legal-tender silver dollars, and that the number of Mexican dollars coined annually from new bullion amounts to about \$25,000,000, this coinage can not be considered as adding materially to the world's stock of coin, for the reason that the bulk of the Mexican dollars coined are soon melted down and used in other coinages,

or absorbed in Asiatic trade. The conversion of bullion into Mexican dollars is only a convenient way of utilizing it for eastern trade.

The mints of Japan are still open to the coinage of full legal-tender silver yens, or dollars, and they coined during the year 1888 over \$8,000,000, and in the year 1887 over \$9,000,000 in silver yens. Some full legal-tender coinage is executed annually by Austria-Hungary, both in silver trade coins (Maria Theresa thalers), for circulation in the Levant, and silver florin and two-florin pieces for domestic trade, the value of the former being for the year 1887 about \$3,175,000 and for 1888 about \$1,100,000, and of the latter about \$8,000,000 in 1887 and \$4,000,000 in 1888.

Some full legal-tender silver coinage is executed annually by France for its possessions in Cochin China and in Africa, and some by Holland for its foreign possessions. With these exceptions, the silver coinages of the world consist almost exclusively of subsidiary pieces, struck for change purposes by European and South American countries.

Of the silver coinage of Mexico it would be safe to say that from \$5,000,000 to \$10,000,000 remains annually in existence as coin either in Mexico or China.

It would be a low estimate to say that at least \$10,000,000 worth of silver is exported annually to China, Asia and Africa, exclusive of any portion which goes into the coinage of British India.

Soetbeer, the eminent German statistician, in an unpublished article recently received from him by the Director of the Mint, places the exportation of new silver annually to Asia and Africa, exclusive of what goes into Indian coinage, at from 400,000 to 500,000 kilograms, or from \$16,000,000 to \$20,000,000. He estimates the amount used annually in the subsidiary coinages of Europe and American States at from 300,000 to 400,000 kilograms of new silver, or from \$12,000,000 to \$16,000,000.

The amount of new silver used annually in the arts and industries is not known even approximately. In this country the consumption is very large, approximating \$5,000,000 annually. An estimate of \$10,000,000 for the rest of the world is not considered excessive, when the amount of silver plate, watch cases and jewelry manufactured in France, Great Britain, Germany, and Switzerland, and the enormous use of silver for ornaments in India, as reported by writers and travelers, is considered.

In a table prepared by the Director of the Mint, from reports of foreign Governments, as to the value of the precious metals employed annually in the industrial arts, eleven leading countries, including the United States, reported a use of \$21,000,000 in silver. This, of course,

includes coin melted down and old material re-used, as well as new bullion.

Soetbeer places the annual consumption of new silver in the industrial arts at 500,000 kilograms, say \$20,000,000.

From the above figures the annual product and consumption of silver may be stated approximately as follows :

Annual product (coining value).....	\$142, 000, 000
Disposition :	
Required by India	35, 000, 000
Coinage of full legal-tender silver by Austria and Japan (average)...	10, 000, 000
Required for subsidiary coinages of Europe and South America and colonial coinages.....	16, 000, 000
Amount annually exported to China, Asia and Africa (other than used in Indian coinage).....	10, 000, 000
Annual coinage of Mexican dollars, not melted.....	5, 000, 000
Amount used in the arts and manufactures (estimate)	15, 000, 000
Surplus product.....	51, 000, 000
Total.....	\$142, 000, 000

From the above it will be seen that the annual surplus product of silver, which would probably be deposited at the mints of the United States, approximates \$51,000,000 (coining) value, corresponding to 39,445,312 fine ounces, worth, at the present market price of silver, (\$0.96) \$37,867,500.

At the present price of silver \$4,000,000 will purchase 4,166,666 fine ounces, or for the year 50,000,000 fine ounces, an excess of 10,554,688 fine ounces above the estimated surplus.

There is in fact no known accumulation of silver bullion anywhere in the world. Germany long since disposed of her stock of melted silver coins, partly by sale, partly by recoinage into her own new subsidiary coins, and partly by use in coining for Egypt. Only recently it became necessary to purchase silver for the Egyptian coinage executed at the mint at Berlin.

It is plain, then, that there is no danger that the silver product of past years will be poured into our mints, unless new steps be taken for demonetization, and for this improbable contingency ample safeguards can be provided.

Nor need there be any serious apprehension that any considerable part of the stock of silver coin of Europe would be shipped to the United States for deposit for Treasury notes.

There is much less reason for shipping coin to this country than bullion, for while the leading nations of Europe have discontinued the

coinage of full legal-tender silver pieces, they have provided by law for maintaining their existing stock of silver coins at par.

In England, Portugal, and the states of the Scandinavian Union, there is no stock of silver coin except subsidiary coins, required for change purposes, the nominal value of which is far in excess of the bullion value. Germany has in circulation about \$100,000,000 in old silver thalers, but ten years have passed since the sales of bullion arising under the anti-silver legislation of 1873 were discontinued. It is safe to say there is no stock of silver coin in Europe which is not needed for business purposes.

The states of the Latin Union, and Spain which has a similar monetary system, are the only countries in Europe which have any large stock of silver coins, and the commercial necessities of these countries are such that they could not afford, without serious financial distress, to withdraw from circulation silver coins which are at par with their gold coins, to deposit them at our mints for payment of the bullion value in notes.

The following table exhibits the stock of gold and silver in European banks at a late date, and the notes issued against them :

Stock of precious metals in European banks and bank-notes outstanding.

[Compiled from the London Economist.]

Banks.	Gold.	Silver.	Notes in circulation.
Bank of England.....	£19,519,659	.....	£25,204,740
Bank of France.....	51,930,000	£50,247,000	119,837,000
Imperial Bank of Germany*.....	26,746,000	11,000,000	55,665,000
Austro-Hungarian Bank.....	5,442,000	16,005,000	43,642,000
Netherlands Bank.....	5,308,000	5,984,000	17,725,000
Bank of Spain*.....	4,000,000	5,663,000	28,966,000
National Bank of Belgium*.....	2,600,000	1,306,000	14,168,000
Bank of Russia.....	30,049,000	2,919,000	95,142,000
Total.....	145,594,659	93,094,000	400,349,740

*Gold and silver not divided, but estimated from best authorities, agreeing substantially with the division given by the Commercial and Financial Chronicle and the Financial and Mining Record.

In view of these facts, there would seem to be no sufficient reason for limiting the amount of silver bullion, which may be deposited for Treasury notes, and there are strong reasons against such limitation.

If deposits were limited to \$4,000,000 worth per month, the amount of silver received might be somewhat smaller than under the proposed measure, which fixes no limit, but the difference in the quantity deposited would hardly compensate, in my judgment, for the effect which the restriction would have on the silver market.

Such a restriction would have a decided tendency to prevent the normal rise in price, because it might leave a surplus even of our own product, counting that which comes from Mexico to this country, and the mere fact of there being a limit to the amount that the United States would receive and issue notes upon, would be a constant menace to the price of silver. Moreover, the limitation to \$4,000,000 worth a month would necessitate a distribution of the amount which would be received at the different mints of the United States each month, so that when the full amount of the quota fixed for any one institution was full, no further deposits could be received that month, and the result might be to throw a large stock on the market in such localities, which, of itself, would have a tendency to depress the price.

If, however, any limitation be thought necessary, it would seem preferable to restrict deposits to the product of our own mines, or the mines of this continent, or to deposits of new bullion, as distinguished from foreign coin and foreign melted coin, rather than to limit the amount to be received to a specific quantity or value.

He is a dull observer of the condition and trend of public sentiment, in this country, who does not realize that the continued use of silver as money, in some form, is certain. No measure can be presented to which it may not be possible to find objections. This one is suggested with a view to promoting the joint use of silver and gold as money, and with the full confidence that it will secure all the advantages hoped for, from any of the plans proposed, without incurring their real or apprehended dangers.

PRECIOUS METALS.

Deposits.

The value of the gold deposited at the mints and assay offices, during the fiscal year 1889, was \$48,900,712.04, of which \$6,764,276.28 represents redeposits.

Of the gold deposited, \$31,440,778.93 was the product of our own mines; \$6,583,992.65, foreign coin and bullion; \$585,066.87, light weight domestic coin; and \$3,526,597.31, old material.

The deposits and purchases of silver aggregated 35,627,273.69 standard ounces, of the coining value of \$41,457,190.97. Included in the above, are 188,237.24 standard ounces, of the coining value of \$219,039.68, redeposits.

Of the silver received, 32,895,985.50 standard ounces, of the coining value of \$38,278,964.79, was classified as domestic product.

Foreign silver bullion was deposited to the amount of 1,182,110.97 standard ounces, of the coining value of \$1,375,547.30, and foreign silver coin, containing 364,750.71 standard ounces, of the value of \$424,437.18.

Uncurrent subsidiary coins of the United States were melted, containing 431,449.01 standard ounces, of the value of \$502,049.75.

Trade dollars were melted, containing 6,714.25 standard ounces, of the coining value of \$7,812.94, and old silver plate, etc., containing 558,026.01 standard ounces, of the coining value of \$649,339.33.

Coinage.

The coinage of the mints was as follows:

Gold.....	\$25, 543, 910 00
Silver dollars.....	33, 793, 860 00
Subsidiary silver.....	721, 686 40
Minor coins.....	906, 473 21
Total.....	60, 965, 929 61

Gold bars.

In addition to the coinage, gold bars were manufactured of the value of \$22,241,121.42, and silver bars of the value of \$6,709,246.13, a total of \$28,950,367.55.

Fine gold bars were exchanged for gold coin, free of charge, principally at the assay office at New York, of the value of \$57,507,812.42.

Purchases of silver.

The purchases of silver by the Secretary of the Treasury for the coinage of the silver dollar, aggregated 28,557,109.79 standard ounces, costing \$23,998,763.47, an average cost of \$0.93375 per ounce fine.

Purchases were also made by superintendents of mints, in lots of less than 10,000 ounces, aggregating 748,017.72 standard ounces, costing \$630,013.31, while silver, contained in gold deposits and remnants of bars, was purchased to the amount of 104,718.08 standard ounces, costing \$89,077.33.

The total purchases for the silver-dollar coinage during the year aggregated 29,409,845.59 standard ounces, costing \$24,717,853.81, an average cost of \$0.9338 per ounce fine.

The total amount of silver purchased for the coinage of the silver dollar, from February 28, 1873, to November 1, 1889, was 299,889,416.11 standard ounces, costing \$286,930,633.64, an average cost of \$1.0631 per ounce fine. The bullion value of the silver dollar, at the average cost for the whole period, is \$0.822.

The profit on the coinage of silver to the close of the fiscal year 1889 aggregated \$57,378,254.18, of which \$781,898.88 have been paid for expenses of distributing the coin and \$246,617.73 for reimbursement of operative wastage and loss on silver sold in sweeps, leaving a net profit of \$56,349,737.57.

The price of silver fluctuated during the fiscal year 1889, from 42½*d.*, the opening price on July 1, 1888, to 44½*d.*, the highest price on September 22, 1888, closing at 42*d.* on June 30, 1889.

The average price of silver in London during the fiscal year was 42½*d.*, equivalent at the average rate of sight sterling exchange to \$0.935 per ounce fine. At this price, the bullion value of the standard silver dollar is 72 cents.

Earnings and expenditures.

The earnings of the mints from all sources during the fiscal year aggregated \$10,351,701.47, while the expenditures and losses of all kinds amounted to \$1,502,665.60, leaving a net profit of \$8,849,035.87.

Imports and exports.

The loss of the precious metals by *net* export during the year was :

Gold.....	\$49, 661, 101
Silver.....	12, 034, 403
<hr/>	
Total.....	61, 695, 504

The export of gold, as well as the net loss of gold, was materially larger during the last fiscal year than any year since 1875.

The heavy movement of gold from the United States, which commenced in May, 1888, continued with some interruptions until the end of July, 1889.

The value of the fine gold bars exported, principally to France, England and Germany, since May, 1888, aggregated \$61,435,989. This large loss of gold is attributed to various causes, among which may be mentioned, first, the unfavorable balance of trade; second, the high price of exchange on London; third, the high rate of interest by the Bank of England; and, fourth, the expenditures by Americans in Europe, principally on account of the Paris Exposition.

In the report of the Director of the Mint, will be found an article treating in detail of this movement.

Product.

The mines of the United States yielded, during the calendar year 1888, precious metals, as follows :

Gold :

Fine ounces.....	1, 604, 841
Value.....	\$33, 175, 000

Silver :

Fine ounces.....	45, 783, 632
Commercial value.....	\$43, 020, 000
Coining value.....	\$59, 195, 000

The product of gold and silver in the world is estimated by the Director of the Mint to have been, for the same year :

Gold.....	\$105, 994, 150
Silver.....	{ Commercial value..... 103, 556, 260
	{ Coining value..... 142, 437, 150

World's coinage.

The coinage of the world, for the calendar year 1888, so far as reported, was :

Gold.....	\$134, 720, 639
Silver.....	149, 737, 442

Deducting recoinages reported, and the coinage of Mexican silver dollars, the addition to the world's stock of coin during the year was :

Gold.....	\$109, 161, 426
Silver.....	94, 666, 108

Metallic stock.

The stock of gold and silver in the United States is estimated to have been on November 1, 1889, \$1,115,379,639, of which \$684,194,686 consisted of gold coin and bullion ; \$343,638,001, of standard silver dollars ; \$76,628,781, of subsidiary silver coins ; and \$10,918,171, of silver bullion in the mints.

Industrial consumption.

The consumption of gold and silver in the industrial arts in the United States is reported to have been for the last year, approximately, gold \$16,500,000, silver \$8,000,000. Of the gold, about \$3,500,000 represents domestic coin melted ; about \$2,000,000, old and foreign material ; and \$10,000,000, new gold, the product of our mines.

Of the silver used in the arts, not less than \$6,000,000 consisted of new silver.

Legislation.

Legislation is recommended looking towards the discontinuance of the coinage of the three-dollar and one-dollar gold pieces and the three-cent nickel piece. These denominations of coin serve no useful purpose, and there is no demand for them by the business public. The three-cent nickel piece is so nearly the size and so much resembles the ten-cent silver piece that it is frequently mistaken for it.

The report of the Director of the Mint exhibits in detail the operations of the mints and assay offices for the fiscal year, and, in addition to the precious-metal statistics of the United States, contains valuable information received through the representatives of this Government abroad, in regard to the production, coinage, and movement of the precious metals, in the different countries of the world.

DEPOSITS OF PUBLIC MONEY.

The monetary transactions of the Government have been conducted through the Treasurer of the United States, nine sub-treasurers, and two hundred and ninety-six national-bank depositaries.

The amount of public moneys deposited with national banks on the 1st of January, 1887, was about \$20,000,000. Prior to that date, for a number of years, the average was considerably less. During the year 1887 the amount so deposited increased until, in October, it was \$31,767,478, and, in December, it had swollen to \$52,199,917. The highest point reached was in April, 1888, when the amount so deposited was \$61,921,294, since which time it has decreased until, on the 31st of October, 1889, it was \$47,495,479. There should be a further reduction, at the earliest day practicable, of at least \$30,000,000, leaving only such amounts as are necessary for the business transactions of the Government.

The national-bank depositaries have been, and are, useful auxiliaries to the sub-treasury system, but the deposit of public funds therewith to an amount largely in excess of the needs of the public service is wholly unjustifiable. Such a policy is contrary to the spirit of the act of August 6, 1846, which contemplates a sub-treasury independent of the banks.

It necessarily involves temptation to favoritism of the most objectionable character.

It makes the Treasury more or less dependent upon the banks, on account of the difficult and delicate task of withdrawing the deposits, when wanted, without creating serious disturbance of financial conditions.

It involves the exercise of a most dangerous power by the Secretary of the Treasury, whereby he may, if so disposed, expand or contract the currency at will, and in the interest of certain favorites whom he may select.

It is grossly unjust to the Government to grant the free use of its money, while it pays to the very parties thus favored, 4 and 4½ per cent interest on its own bonds, which are pledged as security for the money thus received.

There seems to be no excuse for this policy, when the Treasury could use the same money in the purchase of bonds, and thereby return it to circulation and save a large part of the interest.

It is manifestly unfair to the people to give the banks the use of their money for nothing, while they are required, by the banks, to pay from 6 to 8 per cent. interest for it.

Bad as these features of such a policy are, a more serious objection is found in the difficulty and danger encountered in the withdrawal of such excessive deposits. Money thus deposited goes at once into the channels of trade, and business is adjusted to the increased supply.

A sudden or injudicious withdrawal would be felt far more severely by the large class of business borrowers than by the banks. The latter are money lenders, and a stringency may only increase their rates and add to their profits; while the former, having based their business ventures upon the accommodations afforded by the banks, may be utterly ruined when such accommodations are suddenly withdrawn.

Another instance of such excessive deposits occurred in the administration of Jackson. On the 1st of November, 1836, the amount of Government funds deposited in banks was \$49,377,986.30. To dispose of this large sum the act of June 23, 1836, was passed, providing for the distribution of \$37,468,859.97 among the States. This of course made necessary a withdrawal from the banks, and in order to make such withdrawal as easy and safe as possible, it was provided that the money should be distributed in quarterly installments, commencing January 1, 1837. Three of the installments were paid, amounting to \$28,101,644.91, but just after payment of the third, the depository banks suspended, and the terrible financial crisis of 1837 followed.

Had the warnings of history been heeded, the present administration might have been saved from one of its gravest inherited embarrassments, for which it is in no sense responsible.

Of course there is no danger of any such results at this time as occurred in 1837. The amount on deposit then was many times greater,

in proportion to the wealth and population of the country than it would be now, while the actual excess at present is only about half as great as it was then.

What would, under the conditions of 1837, produce wide-spread disaster and ruin, might, in 1889, produce only temporary disturbance, stringency, and possible loss.

A careful and conservative administration of our national finances should, however, seek to avoid such disturbance if possible.

Finding myself confronted with this inherited difficulty, and though thoroughly disapproving the policy which created it, I have, nevertheless, felt compelled to move with great caution, lest the cure of the evil might prove more detrimental to the public interests than the evil itself. It is my purpose, however, at the earliest moment deemed practicable, to commence the withdrawal of these funds in such limited amounts, and under such conditions, as will be least likely to injuriously affect the business interests of the country, and, unless Congress shall otherwise direct, to invest the money in the purchase of bonds, in case they can be obtained at a fair price.

If the banks which have bonds deposited to secure this money, are inclined to reciprocate the favors they have received from the Government, by selling them to the Treasury at the liberal rates offered, the withdrawal will considerably increase rather than diminish the money in circulation, and relieve their borrowers from all danger and inconvenience.

NATIONAL BANKS.

The report of the Comptroller of the Currency exhibits the operations of the Bureau for the year ending October 31, 1889. During this period 211 new associations entered the system, an increase of 79 banks over the preceding year. The average yearly increase for the past eleven years has been 159. Forty-one banks went into voluntary liquidation, and two failed and were placed in the hands of receivers. There were in existence, October 31, 1889, 3,319 national banks, the greatest number since the inauguration of the system, with an aggregate capital of \$620,174,365. On the 30th day of September, 1889, the date of the last reports, the number reporting was 3,290, the remaining twenty-nine not then having opened for business. A summary of these reports shows a total capital of \$612,584,095, a surplus of \$197,394,761; undivided profits, \$84,866,869; gross deposits, including amounts due banks, \$1,950,935,161; loans and discounts, \$1,805,729,739; an increase in each of these particulars over any previous report.

The amount of circulation outstanding was \$203,662,732, of which

\$131,383,334 was secured by pledge of United States bonds, and the remainder, \$72,279,398, was represented by deposit of lawful money in the Treasury. The banks held \$194,972,900 in United States bonds, of which \$146,471,700 were to secure circulating notes; also \$164,326,449 in specie, \$86,752,093 in legal tender notes, and United States certificates of deposit amounting to \$12,945,000. The gross decrease in circulation, including the notes of gold banks, during the year was \$37,486,139, and the decrease in circulation secured by United States bonds was \$22,159,043.

The large number of new banks organized in the western and southwestern sections of the country affords evidence of the facility with which the system adapts itself to the requirements of communities widely separated, with varied social conditions, and transacting business in accordance with the dissimilar customs that result from our climatic and race differences. Texas ranks first in the number of new banks organized during the year, Pennsylvania first in number of active banks, New York in deposits, and Massachusetts in capital.

The banks now derive no profit from their circulation, and an actual loss is inflicted upon the smaller banks, and upon those located in the newer sections of the country, by reason of being obliged to purchase bonds at a high and steadily advancing premium, as a basis for circulation. A change in existing laws is necessary to prevent serious contraction of the currency, by withdrawals from the system.

The remedies proposed by the Comptroller are (1) a reduction in the minimum of bonds deposited to secure circulation; (2) an increase in the percentage issued thereon in circulating notes; and (3) a reduction of the tax now levied on circulation. These recommendations are approved.

It is believed that any probable withdrawal of bonds by existing banks will be about equaled by the bonds deposited by new banks, which would organize more rapidly under the new and more favorable conditions proposed, and that an increased percentage of note issues may be depended upon to neutralize the tendencies to contraction.

Some additional legislation is necessary to enable the Comptroller to supervise the affairs of banks in voluntary liquidation until all claims are fully paid, or the assets exhausted. It is recommended that the office of assistant examiner be created. Also that the detailed reports of the several bank associations be published semi-annually.

It is worthy of remark that the loss to creditors from failure of national banks appears to be less than by the failure of other banking institutions.

The comparative statements, published in the report of the Comptroller, show the operations of the clearing houses of the United States for October, 1888, and October, 1889, and a gratifying increase during the year in total exchanges. It is estimated that the gain accruing to the Government by reason of national-bank notes lost and unredeemed is from one-half to 1 per cent. of the total issue.

The transactions of the year indicate that a fair degree of prosperity has attended the operations of the associations belonging to the system, and in every department, except that of circulation. In a general way it may be said that, considered as banks of discount and deposit, the associations have successfully met the requirements of the communities where they are located, and have contributed their proper share to the general prosperity which has resulted from the activities of the year.

IMMIGRATION.

By act of August 3, 1882, the Secretary of the Treasury is charged with the supervision of immigration into the United States, and is empowered to contract for that purpose with State commissions, boards, or officers charged with the local affairs of immigration at any port.

Contracts were accordingly made and are now in force with the State immigrant commission at Portland, Me., Boston, New York, Philadelphia, Baltimore, Key West, New Orleans, Galveston, and San Francisco. At other points where immigrants arrive there were no State immigrant officials, and the enforcement of the law was committed to collectors of customs, aided in some cases by immigrant inspectors appointed under the alien contract-labor law. Experience has disclosed grave difficulties in the execution of the law through State agencies, as they are not subject to the exclusive official control of the Secretary of the Treasury.

Disputes have arisen as to the respective jurisdictions of national and State authorities, as have also serious differences in the settlement of the accounts of certain State commissions, which were extraordinary and in excess of accounts for like service and expenses at other ports.

These difficulties would be obviated if the entire business relating to immigration were assumed by the General Government, and such action is recommended.

It has been found difficult to make the examination so thorough as to detect all who are included in the prohibited classes, especially at the larger ports, where vessels arrive crowded with immigrants all eager to land.

But a more serious difficulty, in the satisfactory administration of

the law, is found in the facility with which prohibited persons may enter the United States from the British provinces and Mexico. From November, 1888, to April, 1889, inclusive, twenty-eight British steamships landed 1,304 immigrants at Portland, Me., but they previously touched at Halifax, and landed more than three times that number, most of whom, it is reported, came by rail through Canada into the United States without examination or restriction, and the steamships thereby escaped the payment of the passenger tax. Such unrestricted influx of immigrants has, it is believed, resulted in a large addition to the number of those who require public aid, and thus increased the financial burden of the States and municipalities where they chance to fall into distress.

The law now prohibits the landing of any convict, lunatic, idiot, or any person unable to take care of himself or herself without becoming a public charge. To these prohibitions should be added all persons afflicted with leprosy, or similar destructive and contagious diseases, and all persons inimical to our social and political institutions.

It would seem that one of the effective means of preventing the immigration of the prohibited classes would be to require all immigrants before embarkation to obtain certificates of character and fitness from our consular officers abroad, under regulations to be prescribed by the Secretary of State. Such a provision would doubtless prove of value in securing the objects of the law, and would probably tend to simplify and lessen the labors of the local officers charged with its execution.

Receipts of capitation tax and the expenditures on account of immigration at the different ports for the fiscal year ending June 30, 1889.

Ports.	Receipts.	Expenditures.
Baltimore, Md.....	\$14,917 00	\$8,366 92
Boston, Mass.....	17,818 50	21,832 05
Barnstable, Mass.....	32 00	
Charleston, S. C.....	2 00	
Galveston, Tex.....	38 50	
Jacksonville, Fla.....	3 50	
Key West, Fla.....	2,711 50	1,807 30
New Bedford, Mass.....	306 00	
New Berne, N. C.....	50	
New Haven, Conn.....	2 00	
New Orleans, La.....	2,050 50	1,873 55
New York, N. Y.....	176,763 50	168,544 04
Philadelphia, Pa.....	14,107 00	9,709 87
Portland, Me.....	654 00	321 28
Portland, Oreg.....	30 50	
Providence, R. I.....	1 50	
Pensacola, Fla.....	27 00	
Port Townsend, Wash.....	9 50	
San Francisco, Cal.....	6,764 50	2,620 50
Shieldsborough, Miss.....	1 50	
St. Johns, Fla.....	1 00	
Wilmington, Del.....	2 00	
	236,242 00	214,875 51

Net balance to the credit of the fund..... \$21,366 49

Number of immigrants examined by the commissioners of immigration at the several ports named, and the number returned to the countries whence they came, during the year ending June 30, 1889.

Ports.	Number examined.				Number returned.					
	Males.	Females.	Sex not reported.	Total.	Convicts.	Lunatics.	Idiots.	Liable to become public charge.	Contract laborers.	Total.
Baltimore.....	15,133	14,733	.....	29,866	.....	.....	.....	21	.....	21
Boston.....	19,396	16,438	.....	35,834	.....	5	.....	82	1	83
Galveston.....	37	3	33	73	.....	.....	.....	.....	.....	.....
Key West.....	3,164	1,406	.....	4,570	.....	.....	.....	3	.....	3
New Orleans.....	3,081	1,004	.....	4,885	.....	.....	.....	.....	.....	.....
New York.....	186,344	118,338	.....	304,682	10	24	3	494	2	533
Portland, Me.....	977	327	.....	1,304	.....	.....	.....	6	.....	6
Philadelphia.....	15,724	12,019	2	27,745	.....	.....	4	124	.....	128
San Francisco.....	12,817	1,376	.....	14,193	.....	.....	.....	8	.....	8
Total.....	256,673	165,644	35	422,352	10	29	7	738	3	787

THE ALIEN CONTRACT-LABOR LAW.

The chief purpose of this law was the protection of our own laborers by restricting the importation and immigration of foreigners under contracts to labor. To aid in its execution, immigrant inspectors have been stationed at the principal ports, and at important points on our Canadian and Mexican frontiers. They have rendered effective service, and a considerable number of this prohibited class of laborers have been returned to the country from whence they came.

The law undoubtedly is often evaded by the landing of European contract laborers in foreign territory contiguous to our own, whence they, as well as contract laborers whose homes are in such contiguous country, find ready access to the United States by railroads and other means of transportation.

The execution of the law is also impeded by the difficulty of obtaining legal proof of the contract under which these people seek admission into the country. It is believed that, as it stands, it has partially failed of its purpose, because of certain inherent defects, and the impracticability of its administration in some of its features that call for amendment.

It is doubtful if the amendment of October 19, 1888, provides due process of law for the taking into custody, and the returning to the country from whence he came, of a prohibited person who has been permitted to land, or for the recovery of the expense of his return. Neither is it obvious what good reason applies to the admission into the country of professional actors, artists, lecturers, and singers under contract, that does not apply with equal force to ministers of the Gospel, scientific men, and professors in colleges, whose right to like admission is questioned or denied.

By the terms of the law people living in the same hamlet or com-

munity are forbidden the ordinary contract relations of daily life and necessary business transactions, because they happen to live on opposite sides of the national boundary-line. The wisdom or necessity of the law in this regard is not apparent, and its enforcement is manifestly impracticable.

Complaint is made of the hardships of the law in case of citizens of Canada and Mexico, who are employed on foreign railroads entering the United States. Their employment as civil engineers, superintendents, conductors, and brakemen, locomotive engineers and firemen, traveling auditors, and in other capacities, calls them, more or less frequently, sometimes daily, into the United States, and it is claimed they thus become amenable to the law.

The attention of Congress is invited to the subject as worthy of consideration.

CHINESE EXCLUSION ACT.

The existing laws for the exclusion of Chinese laborers from the United States have been vigorously enforced by the officers of the customs to the extent of their ability, but the extensive frontiers of the Union facilitate the clandestine introduction of such persons from the contiguous territory of British America and Mexico.

It is alleged that evasions of the law in this regard are of a serious character. The Department is employing the limited means at command to prevent such evasions, but to police these frontiers in such a manner as to completely suppress the influx of prohibited immigration will require a much greater force than has been provided for. The attention of Congress is invited to this subject.

The results of the practice of landing Chinese immigrants at the Pacific coast ports under bond, and by means of the process of habeas corpus, have been such as to attract the attention of the local officers of the customs at those ports, and to awaken their solicitude for the integrity of the law. It is scarcely an exaggeration to say that a lucrative though illicit industry has sprung up in those ports, based upon an abuse of the machinery of justice, whereby, and by means of bribery, perjury, the stimulant of exorbitant fees, and other forms of deception and fraud, Chinese laborers are given the character of lawful immigrants, and are thus illegally added to the population of the country.

Conformably to an opinion of the Attorney-General, that the transit of Chinese laborers from one foreign place to another, through the territory of the United States, is permitted under the statute, the regulations heretofore governing such transit have been continued, but have been strengthened in various particulars to prevent their conversion to unlawful purposes.

INTERNAL REVENUE.

The report of the Commissioner of Internal Revenue, herewith transmitted, presents in detail the condition of this branch of the public service.

The receipts from the several subjects of taxation under the internal-revenue laws during the fiscal years ended June 30, 1888 and 1889, are as follows :

Objects of taxation.	Fiscal year ended June 30—		Increase.	Decrease.
	1888.	1889.		
Distilled spirits.....	\$69,306,166 41	\$74,312,206 33	\$5,006,039 92	
Manufactured tobacco.....	30,662,431 52	31,866,860 42	1,204,428 90	
Fermented liquors.....	23,324,218 48	23,723,835 26	399,616 78	
Oleomargarine.....	864,139 88	894,247 91	30,108 03	
Bank circulation.....	4,202 55	6,213 91	2,011 36	
Penalties.....	155,547 61	84,991 89		\$70,555 72
Collections under repealed laws.....	9,768 87	6,078 48		3,690 39
Total.....	124,326,475 32	130,894,434 20	6,567,958 88	

These figures show that the increase of revenue during the last fiscal year from distilled spirits was \$5,006,039.92; from manufactured tobacco, including snuff, cigars, cigarettes, etc., \$1,204,428.90; from fermented liquors, \$399,616.78; from oleomargarine, \$30,108.03, and from unauthorized circulation of notes of towns, cities, or municipal corporations paid out, \$2,011.36; while there was a decrease in the amount of penalties collected of \$70,555.72, and of collections of back taxes under repealed laws of \$3,690.39.

Taxes are not always deposited during the years in which they are collected. This fact accounts for the slight discrepancy between the aggregate collections for the two years, as reported in the foregoing table, and the amounts covered into the Treasury by warrants during the same years.

The Commissioner renews the recommendation made in previous reports for the taxation of fractions of gallons of distilled spirits. The experience of his office has demonstrated conclusively that distillers are disposed to draw off spirits at such strength of proof as to make their packages contain constantly a large and often the largest possible untaxed fraction, a taxable fraction of a gallon occurring only by some mischance. In the ascertainment of the contents of a package of distilled spirits which are either exactly at proof, as defined in section 3249, Revised Statutes, or below proof, no fraction occurs other than one-half of a gallon, but when the spirits are above proof the calculation of the proof gallons may result in a final fraction of any size. In the computation and collection of the tax the law provides only for the

taxing of even gallons, the fraction either being dropped or treated as a whole gallon, as it falls below or increases beyond a half gallon, doubtless upon the consideration that the sum of the fractions thus dropped and added would be, on an average, about the same. But the advantages thus derived by distillers has not been sufficient to satisfy many of them, and it is sought to be increased by warehousing spirits in packages smaller than barrels, so as to double and even quadruple the untaxed fraction of less than a half of a proof gallon.

The loss to the revenue by this adroit manipulation of packages amounts each year to a large sum, and gives rise to much discontent on the part of those distillers of fine whisky whose product lies three years in bonded warehouses, and who are therefore unable to utilize this expedient for evading the payment of a portion of the tax. In view of all the facts the recommendation of the Commissioner is approved.

The Commissioner reports that the number of revenue agents he is now authorized to employ is inadequate to the needs of the service, and I recommend that five additional agents be authorized.

ALASKA.

The rapid development of the Territory of Alaska in population and trade appears not to have been foreseen by those in authority, and in consequence the customs legislation applicable to that collection district is found to be inadequate and unsuited to present needs. This condition is a misfortune to the public interest and a hardship to the enterprising people who, amid difficulty and discouragement, are adding the resources of a vast and promising domain to the aggregate wealth of the nation.

The present volume of trade is not less than \$10,000,000 per annum, and is constantly growing. This Territory, still in its infancy, has begun to attract attention as a promising field for the investment of capital, skill, and energy. It has also become a popular resort for tourists, many of whom become interested in its industries. In 1884, when the Territory was organized into a civil and judicial district, one steamer a month ran to the principal port of Sitka; now there are four and sometimes five per month during the summer, and a considerable number of sail-vessels. In southeastern Alaska there is a large coast-wise trade, consisting principally in the products of the salmon industry, fish-oils, furs, mineral ores, and the precious metals.

Sitka, the only legal port, is nearly 500 miles distant from Dixon Entrance, the exterior boundary channel through which the trade of the southeastern peninsula is conducted. It does not appear practica-

ble to protect the revenue or reasonably accommodate public interests without a port of delivery near the boundary channel. Mary Island has been favorably mentioned as a site for such a port by navigators, traders, and officers of the revenue. Appropriations are needed for the construction of the necessary custom-house buildings to answer immediate needs, and also for a light-house and fog-signal on the island, as the only present aids to navigation are the topographical features of the country, which have not proved available to prevent serious loss to shipping. This accommodation is needed on public grounds, in order that vessels may receive permission to land passengers and cargo at the several shipping-stations on their way to Sitka. I am also advised that Wrangel, Juneau, Sand Point, Kodiak, and Ounalaska, should be constituted ports of delivery with deputy collectors clothed with appropriate powers. In 1869 the Secretary of the Treasury authorized deputy collectors to be stationed at some of these places with instructions to enter and clear vessels and receive duties and fees. This action was without authority of law, and the trade of the Territory has become too important to rest upon a doubtful footing as to legality.

It is desirable that early steps be taken for laying off and reserving sites in Alaska, for light-houses and other public structures, to prevent future trouble and expense by reason of the occupation of the necessary sites by settlers.

It has been found impracticable to give any appreciative effect to the laws and regulations forbidding the introduction of spirituous liquors into the Territory. Such public sentiment as exists there is adverse to prohibition, and the Executive is without means to enforce the law over so large and difficult an area. The traffic in spirits is free and open, and the consequences to the natives most deplorable. The subject is one of such notoriety that it is only necessary to remind Congress that there has been no amelioration of the particularly grievous condition of the natives in the Aleutian Islands. The wisdom of extending the laws and administrative agencies relating to the Indian service over Alaska is worthy of attention.

Seal islands.

The lease now held by the Alaska Commercial Company, of the exclusive right to take fur-seals on the islands of St. Paul and St. George, in Behring Sea, expires on the 1st day of May next. By the provisions of sections 1963 to 1967, Revised Statutes, the Secretary of the Treasury is required to lease to proper and responsible parties, for the best advantage of the United States, having due regard for the

interests of the Government, the native inhabitants, their comfort, maintenance, and education, the right of taking fur-seals on the islands named, and of sending vessels thereto for the skins so taken, for the term of twenty years, at an annual rental of not less than \$50,000, and a revenue-tax of \$2 upon each fur-seal skin taken during the continuance of the lease. These provisions impose a large measure of responsibility upon the Secretary, and the official record of legislative proceedings in the last preceding session of Congress indicates that it is the will of that body that such discretion should remain as originally provided in the statute.

The present lessees of the seal islands pay an annual rental of \$55,000 and a combined revenue tax and royalty of \$2.62½ per skin, and an experience of twenty years has shown the capability of the leasing system, when faithfully administered, to respond to the various public interests concerned.

The Pribylov Islands are now the only important sources of supply for merchantable seal-skins. The herd which makes those islands its home is variously estimated to number from four to six millions of seals, but the Treasury agents on duty at the islands have begun to note an apparent decrease in the number of seals resorting to the islands in the breeding season. It is much to be desired that any such decrease is but temporary, for should the Pribylov herd disappear, there is none to replace it. It is estimated that upwards of 200,000 seals were killed by unauthorized sealing vessels during the breeding seasons of 1888 and 1889, and as the great majority of these were cows, there was an almost equal loss of pup-seals. It is obvious that the herd must soon disappear under such a decimation of its productive members, even if the habitual use of fire-arms did not tend to drive the seals away from their haunts in advance of their extermination.

The act of March 2, 1889, confers all the needed authority upon the Executive to protect the seals within the waters of the United States, but an appropriation is necessary to provide effective means for exercising that authority. There are not enough revenue cutters at the disposal of the Department to properly police the sealing-grounds during the dense fogs that prevail throughout the breeding season, and the great number of petty vessels engaged in marauding would render it impossible for their captors to furnish prize crews to take them all to Sitka for condemnation. The present state and prospects of the industry seem to call for prompt and energetic measures to preserve the valuable Pribylov herd from destruction or dispersion. It is suggested that a sufficient force of cruising vessels should be chart-

ered, equipped, and manned, as auxiliary to such revenue vessels as could be spared from stations, and a depot for prisoners established at Ounalaska, whence they could be transferred to Sitka, and dealt with according to law. It is believed that two or three seasons of energetic effort would break up the present destructive and threatening operations.

REVENUE MARINE.

The expenses of the revenue-cutter service were \$365,500 during the fiscal year, of which \$57,000 were spent in repairs to six of the vessels, and \$10,500 for anchorage duty. Thirty-seven vessels were in commission during the year. The cruising record shows a decrease in the aggregate number of miles traveled, which is due to the necessity of totally withdrawing some worn-out vessels and laying up others for repairs. Two new vessels are under construction, and six others are much needed for service at Boston, New York, Philadelphia, Galveston, San Francisco, and Astoria; such vessels to be of moderate size and cost.

During the summer the revenue steamer *Bear*, aided by the naval steamer *Thetis*, established the prescribed refuge for seamen at Point Barrow, on the northern extremity of Alaska. The house is a strong and warm structure, with a comfortable accommodation and equipment for seventy-two persons, including an ample supply of provisions, fuel, and medical stores. The cost of this refuge and equipment has been \$12,201.36, leaving a balance of \$2,898.62, applicable to the pay of the keeper and his two assistants.

Conformably to the act of May 16, 1888, anchorage-grounds were established and regulations prescribed for the bay and harbor of New York. The revenue steamer *Manhattan* was assigned to the duty of enforcing the anchorage regulations. Within the six months ending with the fiscal year 1,328 vessels were found improperly anchored, whereof 948 were towed to a proper anchorage, and the others removed upon notice.

Pursuant to the purpose of the proclamation of the President, warning all persons against the violation of existing laws for the protection of seal-life in the waters of Behring Sea, the revenue steamer *Rush* was directed to aid their enforcement, and began her cruise in those waters on June 24, which lasted until the 25th of the following August.

During the cruise seventeen suspected vessels were boarded and searched. The British schooners *Black Diamond*, *Minnie*, *Pathfinder*, *Juanita*, and *Lillie*, and the American schooner *James G. Swan*, were found to have violated the law against sealing in the waters of Alaska, and, with

the arms on board and 2,472 seal-skins, were seized, and the arms and skins being removed, the vessels were ordered to repair to Sitka for judicial proceedings. These orders were disregarded by the masters of the several vessels, who took them to their home ports.

During her visit to the Arctic the steamer *Bear* rendered material assistance to sundry whaling vessels, and on her return cruise brought to Sitka four seamen and five miners found dangerously sick. The customary aid was rendered during the year by the revenue cutters to the Life-Saving Service, a distance of 7,713 miles having been cruised in the performance of this special duty. In the month of September the revenue cutter *Rush*, on her voyage from Behring Sea, coasted in search of the disabled schooner *Alpha*, and finding her at Yakutat Bay, took off her crew and passengers, numbering twenty-three persons, whom she landed at Sitka.

The thirty-seven vessels, heretofore mentioned as in commission during the year, cruised 274,287 nautical miles; boarded 22,893 vessels, of which 1,127 found violating the law incurred penalties aggregating \$145,196.70. A total of 122 distressed vessels were assisted, their value with that of their cargoes amounting upwards of \$2,500,000. Twenty-six persons were rescued from drowning, and 1,021 persons were on the distressed vessels assisted.

The personnel of the service consists in 220 commissioned officers, 27 pilots, and 815 seamen.

LIGHT-HOUSE SERVICE.

During the past fiscal year one hundred and fifty-one new lights were established and two discontinued. There has also been a material increase in the number and distribution of other aids to navigation. The estimates call for a considerable increase upon current appropriations, and if Congress should not deem it advisable to grant the full amount, it is hoped that the reduction will fall upon contemplated new works rather than that the maintenance of existing works should be impaired. The great storms prevalent during the year have fallen heavily upon the Light-House Establishment, and the call for new light-ships and light-house tenders is an imperative one.

Legislation is needed to prescribe penalties for violation of the regulations for lighting bridges over navigable waters, and to authorize the establishment of inexpensive lighted, in addition to the provision for unlighted, beacons.

MARINE-HOSPITAL SERVICE.

This service, originally established for the care of sick and disabled seamen and the hygiene of merchant vessels, has become additionally charged with important duties relative to the public health. During the fiscal year nearly 50,000 sick and disabled seamen were relieved at eighteen marine hospitals and two hundred and ten relief stations. Physical examinations were held of merchant seamen prior to shipment, of pilots, inclusive of tests for color-blindness, of surfmen for the Life-Saving Service, and of officers for the Revenue Marine.

For the safe guarding of the public health, seven national quarantine stations are in operation, besides hygienic laboratories for investigation of the causes and treatment of epidemic diseases, and a periodical bulletin is published, circulating information relative to the appearance and movement of epidemics. There has likewise been much inland administration of a sanitary character, particularly in connection with the recent epidemic of yellow fever in Florida.

The expenditures during the fiscal year for the Marine-Hospital Service were \$540,134.53, and \$246,995 were expended for preventing the spread of epidemic disease.

In his accompanying report, the Supervising Surgeon-General asks for a small addition to the clerical force of his office, and for the repeal of the statutory restriction upon the assignment of officers to duty at Washington, and these recommendations are approved.

STEAMBOAT-INSPECTION SERVICE.

The cost of this service was \$256,994.36 for the fiscal year, a slight decrease from the expense of the previous year. During the past fifteen years there has been a gain of 73 per cent. in the number of domestic steam-vessels, and an increase of 27 per cent. in the cost of inspection. The loss of life on steam-vessels has been reduced 54 per cent.

It is recommended that all laws be repealed which provide a separate establishment for the inspection of foreign steam-vessels, and that the inspectors of domestic steam-vessels be authorized and required to perform all necessary services in connection with the inspection of foreign steamships.

The offices proposed for abolition are virtually sinecures, and much sought after in consequence, and until they are abolished the Executive will remain subjected to importunity to fill them. The services of three of these officers have been dispensed with.

Existing statutes fix different rates of pay for the inspecting officers at the several ports, and the present result is great inequality and injustice. It is advised that the Department be authorized to newly rate the salaries within the limits of the appropriation for the service.

LIFE-SAVING SERVICE.

The statistics of the Life-Saving Service continue to show, as they have long done, the admirable character of an institution that Congress created and has maintained on a liberal scale. The humane work of the service during the past fiscal year embraces the rescue from peril of 3,106 lives.

In addition to this, property exceeding in value the sum of \$5,000,000 was saved from destruction. Among the additions of the year to the facilities of the service have been three new stations, with seven others still under construction, making in all two hundred and thirty-two stations.

The compensation to surfmen of \$50 per month when employed upon such perilous duty is inadequate at some of the stations, and it is advised that the Secretary of the Treasury be authorized to adjust the pay of these employés at their several stations according to the equities of the case. The particulars of the operations of this branch of the service are contained in the report of the General Superintendent.

COAST AND GEODETIC SURVEY:

The Superintendent of this service being required by law to report annually and directly to Congress, reference is to be had to his report for a statement of the size, distribution, employment, and cost of the staff, and of the expense of the service at large.

An increase of expedition, issue, and demand is to be noted in the publication work of the bureau, which has embraced 49 new charts, 22 revised editions of old charts, 13 notices to mariners, 7 miscellaneous bulletins, a collection of tide tables, and sundry editions of the Atlantic and Pacific Coast Pilots. Field-work in triangulation for determining the topography of the country has been done in thirty-three of the States and Territories, and hydrographic work in seventeen States and Territories.

The Navy Department has been assisted in selecting navy-yard sites in the Gulf of Mexico and on the South Atlantic coast and North Pacific coast of the United States. Progress has been made in the triangulations to connect with the work of the Northeastern Boundary Survey and that of the Dominion of Canada. The work for a pro-

visional determination of the Alaskan and British Columbian boundary has been entered upon. A survey, with examination of the oyster-grounds of North Carolina, has been made at the request of the governor of that State, and there has been co-operation with sundry State geographical and geological surveys.

The report will show the operations and appliances for securing greater accuracy in the standards of weight and measure, and in the establishment of a true ratio between the statutory and metrical standards of length.

The United States, upon the invitation of the German Government, has become a member of the International Geodetic Association, and will be represented at its approaching meeting. The growing work of the service calls for more office accommodation at the seat of Government.

ENGRAVING AND PRINTING.

Congress having by successive acts prohibited an increase in the number of steam plate-printing machines, or the repair or reconstruction of the same, or the payment of a higher or further royalty than one cent per thousand impressions, it was deemed best to discontinue the use of such machines in the Bureau of Engraving and Printing after the close of the fiscal year. The press-work is now all done by hand-presses, in a satisfactory manner, and the estimates for the approaching fiscal year have been made upon the assumption that steam-presses are not again to be used.

PUBLIC BUILDINGS.

There are under the control of the office of the Supervising Architect of this Department 229 completed and occupied buildings to be cared for from the annual appropriations for "Repairs and Preservation," "Vaults, Safes, and Locks," and repairs to "Heating Apparatus."

During the past year, work of construction and repairs, specially appropriated for, have been prosecuted upon 81 buildings, of which number 25 have been completed.

The total expenditure during the year for sites, construction of new buildings, and repairs, specially appropriated for aggregates.....	\$4, 773, 322 88
For repairs and preservation of completed buildings.....	182, 058. 02
For heating apparatus for new public buildings.....	16, 106 54
For repairs, heating apparatus in completed buildings.....	67, 035 01
For vaults, safes, and locks.....	55, 449 37
For photographic duplication of plans for public buildings..	4, 433 91

Thus making a total expenditure during the year of..... 5, 098, 405 73

I invite attention to the recommendations of the Supervising Architect as to the method of selecting sites for public buildings. There seems to be no good reason why this duty should be devolved upon the Secretary of the Treasury. Its execution causes much interruption to the business of the Department in the prolonged hearings of parties interested, and it is quite impossible for the Secretary to make as satisfactory selections as could be made by a commission. I therefore concur in his recommendations that in future appropriations for the purchase of sites Congress authorize the appointment of commissions to examine all matters connected with proposals received, and to report their decisions, which shall be final, to the Secretary of the Treasury. I also concur in his recommendations that increased accommodations be provided for the engineering and draughting division of his office. The present accommodations are entirely inadequate.

DISTRICT OF COLUMBIA.

The net expenditures on account of the District of Columbia for the fiscal year 1889 were \$5,218,669.92. The revenues deposited in the Treasury on this account for the same period were \$2,523,950.69.

There have been issued during the fiscal year 1889 \$21,000 of the 3.65 per cent. bonds in payment of judgments of the Court of Claims against the District. There have been retired by the operations of the sinking-fund during the same period \$463,400 of the bonded indebtedness of the District, making a net reduction of \$442,400, and reducing the annual interest charge \$27,641.

When the duties of the late commissioners of the sinking-fund were assumed by the Treasurer of the United States on July 1, 1878, the bonded debt amounted to \$22,169,050, which has since been increased \$917,500 by the issue of 3.65 per cent. bonds in exchange for certificates of the board of audit and in payment for judgments of the Court of Claims. There have also been issued \$1,092,300 twenty-year 5-per-cent. funding bonds to replace maturing bonded indebtedness. The bonds retired during the same period amounted to \$3,974,400.

The bonded debt July 1, 1889, was \$20,142,050, showing a net reduction of \$1,961,600, and a reduction in the annual interest charge of \$137,157.72 since July 1, 1878.

The total issue of the 3.65 per cent. bonds to the close of the fiscal year 1889 was \$14,660,750.

Of the bonded indebtedness of the District, \$3,330,550 will be payable in 1891, and \$949,300 in 1892. As all of these maturing bonds bear 6 or 7 per cent. interest, provision should be made to refund them

at a lower rate, and attention is invited to the plan submitted in the Treasurer's annual report on the sinking-fund.

The amount realized from the sale of bonds in which the retentions from contractors with the District of Columbia were invested, exceeds the sum necessary to pay the amounts originally withheld.

The net surplus at the close of the fiscal year 1889 was \$29,551.23, which has been deposited in the Treasury as a miscellaneous receipt to the credit of the United States and District of Columbia in equal parts, as required by the act of February 25, 1885.

Detailed information in regard to the affairs of the District of Columbia will be found in the reports to be submitted by the District Commissioners, and by the Treasurer of the United States, *ex officio* Commissioner of the sinking-fund of the District.

CIVIL SERVICE.

It is my belief that the personnel and efficiency of the service have been in no way lowered by the present method of appointments to clerical positions in the Department. The beneficial influences of the civil-service law in its practical workings are clearly apparent. Having been at the head of the Department both before and after its adoption, I am able to judge by comparison of the two systems, and have no hesitation in pronouncing the present condition of affairs as preferable in all respects. Under the old plan appointments were usually made to please some one under political or other obligations to the appointee, and the question of fitness was not always the controlling one. The temptation to make removals, only to provide places for others, was always present and constantly being urged by strong influences, and this restless and feverish condition of departmental life did much to distract and disturb the even current of routine work. Under instrumentalities which are now used to secure selections for clerical places, the Department has some assurance of mental capacity, and also of moral worth, as the character of the candidates is ascertained before examination.

The manifold duties of the Department require the closest application on the part of the Secretary and his assistants, and the freedom from importunity now enjoyed for appointments to places that are within the classified service, and the saving of valuable time heretofore devoted to the distribution of minor patronage, are of very great advantage, and enables these officers to devote more thought to the important questions of administration constantly arising. The clerks received from the Civil-Service Commission usually adapt themselves

readily to the duties they are called upon to perform, and rank among the most efficient in the Department.

This Department has for the past twenty years conducted examinations, under its own regulations, for promotions in its service, and employés have been advanced from one grade to the next highest only after having passed a standard examination intended to demonstrate their capability as compared with those who have already reached the higher grades, and to test their familiarity with, and proficiency in, the special work upon which they have been engaged. This system of promotion has worked satisfactorily, and reaches beyond the ascertainment of individual excellence. Clerks have the fact constantly before them that to gratify a laudable ambition for advancement they must always be prepared, as the opportunity for promotion may come at any time, to submit to tests which will disclose their aptitude, their diligence, and their knowledge of the class of work they have been performing. It keeps the service in better form and relieves the appointing power of much persistent persuasion from outside sources to elevate clerks who are illy prepared to fill the higher grades. I take pleasure in referring in this connection to a detailed statement of the examiner, which will be found in the appendix to this report. Among the few positions in the Department excepted from the operation of the civil-service law are the special agents, whose duties are very important and require abilities of a superior order. It has therefore been thought best before appointment to subject the selected applicant to a test of his fitness for the place, and this has been done during the past few months with excellent results. The advisability of pursuing the same course with chiefs of divisions is having serious consideration at this time.

The several reports of the heads of offices and bureaus are herewith transmitted.

WILLIAM WINDOM,
Secretary of the Treasury.

The Honorable

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

PAPERS

ACCOMPANYING

THE REPORT OF SECRETARY OF THE TREASURY.

REPORT OF THE TREASURER.

TREASURY OF THE UNITED STATES,
Washington, November 1, 1889.

SIR: I have the honor to submit the annual report on the operations of the Treasury and the condition of the public business intrusted to my charge.

RECEIPTS AND EXPENDITURES.

The fiscal year which closed on June 30, 1889, a few weeks before the end of the first century from the organization of the Treasury Department, while not distinguished by any conspicuous events, was a remarkable one in the history of the public finances. The net revenues, amounting to \$387,050,058.84, have been exceeded but five times since the foundation of the Government, the receipts from customs having reached the highest point ever attained. The increase of revenues over the twelve months immediately preceding was \$7,783,984.08. The ordinary expenditures, also, were greater than those of any other year, except the period which bore the cost of the war, having been, exclusively of payments on account of the redemption of the public debt, \$22,342,659.93 greater than those for the fiscal year 1888. The surplus revenues, including the amount expended in premium on bonds purchased, were \$105,033,413.24, a decrease of \$14,558,672.85 as compared with the preceding year.

The receipts from issues of the public debt were \$245,111,350, making with the surplus revenues a total of \$350,164,793.24. The disbursements on account of the debt were \$313,922,412.35 for principal, and \$17,292,362.65 for premium, in all \$336,214,775, leaving \$13,950,018.24 as an increase in the balance charged to the Treasurer.

As shown by the warrants issued, the revenues of the Post-office Department were \$53,694,231.33, and the expenditures \$61,111,748.61. To cover the deficit, \$3,870,639.12 was drawn from the appropriation made by Congress and \$1,516,877.98 from the balance on deposit in the Treasury. Of the receipts, \$23,361,442.15 was paid into the Treasury and \$32,012,739.08 was disbursed by postmasters directly, the warrants but not the money passing through the Treasurer's accounts. The disbursements made through the Treasury amounted to \$29,098,959.53. As compared with the preceding year there was an increase of \$3,461,846.55 in the total revenues and of \$5,217,450.55 in the total expenditures on account of the postal service.

Tabular statements in the appendix exhibit in detail all the operations of the year. The following is a summary of the ordinary receipts and expenditures in comparison with those of the year before:

	1888.	1889.	Increase.	Decrease.
Revenue from—				
Customs.....	\$219,091,173.63	\$223,832,741.69	\$4,741,568.06	
Internal revenue.....	124,296,871.98	130,881,513.92	6,584,641.94	
Sale of public lands.....	11,202,017.23	8,038,651.79		\$3,163,365.44
Miscellaneous sources.....	24,676,011.92	24,297,151.44		378,860.48
Total.....	379,266,074.76	387,050,058.84	11,326,210.00	3,542,225.92
Net increase.....			7,763,364.06	
Expenditures on account of—				
Civil and miscellaneous:				
Customs, light-houses, public buildings, etc.....	20,359,455.15	20,154,142.08		205,313.07
Internal revenue.....	3,809,557.94	3,941,466.30	131,908.36	
Interior civil (lands, patents, etc.).....	7,859,468.41	7,359,790.25		499,678.16
Treasury proper (legislative, executive, and other civil).....	34,575,466.33	42,847,717.40	8,272,251.07	
Diplomatic (foreign relations).....	1,593,461.40	1,897,625.72	304,164.32	
Judiciary.....	4,754,851.57	4,463,322.51		291,529.06
War Department.....	38,522,436.11	44,435,270.85	5,912,834.74	
Navy Department.....	16,926,437.65	21,378,809.81	4,452,371.66	
Interior Department (Indians and pensions).....	86,537,816.64	94,516,986.89	7,979,170.25	
Interest on public debt.....	44,715,007.47	41,001,484.29		3,713,523.18
Premium on public debt.....	8,270,842.46	17,292,362.65	9,021,520.19	
Total.....	267,924,801.13	290,288,978.25	36,074,220.59	4,710,043.47
Net increase.....			31,364,177.12	
Surplus available for reduction of debt.....	111,341,273.63	87,761,080.59		23,580,193.04

THE STATE OF THE TREASURY.

The balance charged to the Treasurer on the books of the Department, June 30, 1888, was \$659,449,099.94. In addition there had been paid into his hands, in advance of the issue of warrants, sums aggregating \$606,086.32, with which he had not yet been charged. On the other hand, the amount of \$28,101,644.91 on deposit with the States under the law of 1836 is not borne on his books. By applying these two corrections the balance in the Treasurer's general account, shown by his books to have been \$631,953,541.35, is verified. A year later the balance on the books of the Department stood at \$673,399,188.18, having increased \$13,950,018.24, as already explained. On the first date there was included \$1,429,456.34, and on the latter, \$1,415,433.91, described as unavailable, for which there were no funds.

The statement of assets and liabilities in the Treasurer's last report shows that on June 30, 1888, there was in his custody, in cash and effective credits, \$764,729,535.51, or, excluding the amount unavailable, \$134,811,530.82 more than was charged to him on the books of the Department. This difference was made up of the national bank-note redemption funds, aggregating at that time \$98,929,571.27, and of other deposit accounts, making \$35,275,873.23 more, together with the \$606,086.32 already mentioned, which had been received but not yet formally covered in. On June 30, 1889, the cash and credits amounted to \$160,643,871.26, or \$116,761,831.90 more than appears in the general account, the difference being explainable in the same manner.

The following is a summary of the condition of the Treasury at the

end of the fiscal year in comparison with June 30, 1888, the reserve of \$100,000,000 held for United States notes being included in the balance:

	June 30, 1888.	June 30, 1889.
ASSETS.		
Gold.....	\$314, 704, 822. 46	\$303, 387, 719. 79
Silver and minor coin.....	280, 796, 046. 42	315, 160, 779. 58
United States notes, national-bank notes, and fractional currency..	60, 402, 874. 89	51, 448, 508. 05
Certificates of deposit.....	49, 910, 615. 00	42, 645, 504. 00
Deposits in banks.....	58, 712, 511. 11	47, 259, 714. 39
Public debt and interest paid.....	202, 665. 62	741, 645. 45
Total	764, 729, 535. 51	760, 643, 871. 26
LIABILITIES.		
Certificates of deposit.....	386, 429, 922. 00	433, 873, 208. 00
Public debt and interest.....	14, 288, 568. 40	12, 640, 036. 59
National-bank note redemption funds.....	98, 929, 571. 27	83, 681, 269. 16
Deposits and disbursing accounts.....	35, 275, 873. 23	32, 352, 220. 34
Balance.....	229, 805, 600. 61	198, 097, 047. 17
Total	764, 729, 535. 51	760, 643, 871. 26

In connection with the foregoing it may be not amiss to point out a little more particularly that the business of this office, so far as it relates to the custody of the public moneys, deals with three kinds of funds. First of these are the revenues, which upon their collection are covered into the Treasury by warrant and held for disbursement upon appropriations. Second are the gold and silver coin and United States notes received in exchange for certificates of deposit. These moneys also are covered by warrant, and charged to the Treasurer in general account, the certificates issued being treated as part of the public debt. Lastly come the deposit accounts, consisting of the bank-note redemption funds and moneys set apart from the public funds or received from other sources for specific purposes. These are not covered by warrant, and their amount is an addition to the cash in the Treasury of which the Treasurer alone takes account. The moneys received from these several sources are thrown together, but gold coin, standard silver dollars, and United States notes equivalent to the respective amounts of certificates outstanding must always be on hand. This method of handling the several funds in the Treasury makes it necessary in the statements of assets and liabilities to include as resources all the items of cash and credit, there being no way of setting apart particular kinds of money against the several classes of liabilities, except in the case of outstanding certificates of deposit, as has already been noticed.

The balance of the Treasurer's general account, which is commonly spoken of as the cash in the Treasury, consists therefore of the amount remaining from the revenues and from deposits for certificates, in excess of the disbursements on account of expenditures and redemption of the public debt. The general account itself, as it appears on the books of the Register of the Treasury, is strictly a cash account, a record of sums received and disbursed by warrant of the Department, showing the balance on hand, which is the result of past operations, and is independent of prospective revenues or matured obligations. If the amount of the public debt and of this balance be correctly stated, a simple subtraction will show the debt less cash in the Treasury.

On the Treasurer's books, however, there are written against this balance those demand liabilities of the Treasury proper which arise from the public debt, consisting of the certificates of deposit outstanding, with matured and unpaid principal and interest, and interest accrued

but not yet due. The balance of the account so stated, exclusive of the \$100,000,000 for some time treated as a liability on account of reserve against the United States notes, is identical with that shown by the Treasurer's statement of assets and liabilities. In the latter statement, however, there are added to the moneys in the Treasury received by warrant on general account the funds on deposit for disbursement, and also, on the other side, to the liabilities above noted those arising from these deposits. That statement therefore shows not only the kinds and amounts of all the moneys and other resources in the Treasurer's charge, but also all the outstanding obligations of the Government on whatever account, excepting only the principal of the interest-bearing debt and the United States notes and fractional currency in circulation.

The following is such a statement for the beginning and end of the fiscal year, in a form exhibiting the total available assets, the specific purpose, so far as any is recognized, for which they are held, the demand liabilities on the several accounts, the balance in excess of those liabilities, and the available total balance of moneys in the Treasurer's general account:

	June 30, 1888.		June 30, 1889.	
ASSETS.				
<i>On deposit for certificates.</i>				
Gold coin.....	\$142,023,150.00		\$154,048,552.00	
Standard silver dollars.....	229,491,772.00		262,629,746.00	
United States notes.....	14,915,000.00		17,195,000.00	
		\$386,429,922.00		\$433,873,298.00
<i>Public and special funds.</i>				
Gold: Coin.....	62,426,600.75		83,538,240.40	
Bullion.....	110,255,071.71		65,800,927.39	
Certificates.....	20,928,500.00		36,918,323.00	
		193,610,172.46		186,257,490.79
Silver: Standard dollars.....	14,689,622.00		16,458,004.00	
Fractional coin.....	26,044,062.35		25,140,172.27	
Bullion.....	10,457,669.35		10,707,229.25	
Certificates.....	28,732,115.00		5,487,181.00	
		79,923,468.70		57,792,586.52
United States notes.....	38,430,975.89		30,101,875.54	
Certificates.....	250,000.00		240,000.00	
		38,680,975.89		30,341,875.54
Minor coin.....		112,920.73		225,628.06
National-bank notes.....		7,055,541.08		4,150,537.75
Fractional currency.....		1,357.92		1,094.76
Deposits in national banks.....		58,712,511.11		47,259,714.39
Bonds and interest paid.....		200,789.32		740,209.75
Interest on District of Columbia bonds paid.....		1,876.30		1,435.70
Total		764,729,535.51		760,643,871.26
LIABILITIES.				
<i>Treasurer's general account.</i>				
Certificates outstanding.....	386,429,922.00		433,873,298.00	
Matured debt.....	2,496,095.26		1,911,485.26	
Interest due and unpaid.....	1,667,336.85		1,294,049.82	
Accrued interest.....	10,125,136.29		9,434,501.51	
Balance.....	229,805,600.61		108,097,047.17	
		630,524,091.01		644,610,381.76
<i>Treasurer's agency account.</i>				
National-bank note redemption funds.....	98,929,571.27		83,681,269.16	
Disbursing officers' balances.....	21,999,399.21		23,021,599.93	
Redemption and deposit accounts.....	13,276,474.02		8,430,620.41	
		134,205,444.50		116,033,489.50
Total		764,729,535.51		760,643,871.26

If the business of the Treasury be regarded as consisting of two branches, namely, the issue and redemption of certificates of deposit, and the receipt and disbursement of the revenues and special funds, and if the coin and notes necessary for the security of outstanding certificates be set aside, so that there will be left the moneys available to meet current liabilities on all other accounts, the true state of the Treasury with reference to the obligations to be met by the revenues will be exhibited in the most concise form. The showing from this point of view is as follows:

	June 30, 1888.	June 30, 1889.
Gold.....	\$193,610,172.46	\$186,257,400.79
Silver and minor coin.....	80,036,389.43	58,018,214.58
Notes.....	45,737,874.89	34,493,508.05
Deposits in banks.....	58,712,511.11	47,259,714.39
Total.....	378,096,947.89	326,028,927.81
Liabilities.....	148,291,347.28	127,931,890.64
Reserve.....	229,805,600.61	198,097,047.17
Total.....	378,096,947.89	326,028,927.81

From the preceding statements it appears that while gold was lost both in the aggregate and in the amount not covered by outstanding certificates, the position of the Treasury was stronger at the end than at the beginning of the year in every respect but the amount of reserves, and in this had nearly double the strength that has been considered ample. The gold on hand fell off nearly 4 per cent., but at the same time the total assets, the liabilities, and the reserve all fell off about 12 per cent. At the beginning of the year the free gold was \$45,000,000 in excess of the demand liabilities, and formed 84 per cent. of the reserve; at the close it was \$58,000,000 more than the liabilities and 94 per cent. of the reserve.

UNAVAILABLE FUNDS.

By a direction in the act of Congress making deficiency appropriations for the fiscal year, the sum of \$24,016.43, representing losses in the office of the assistant treasurer in New York, was credited in the accounts of the Treasurer, diminishing by that amount the unavailable funds carried on the books. A loss of \$10,000, reported in 1886, by the assistant treasurer in San Francisco, and subsequently ascertained by an official examination to have occurred, is in the present report stated for the first time as unavailable. This sum, together with the deficit of \$28,959.81 in the sub-treasury at New Orleans, and the defalcation of \$11,611.00 in the assay office at Boisé City, making in all \$42,576.84, is counted in the monthly statements of the public debt and of the assets and liabilities of the Treasury as cash, there being no authority from the Secretary to treat these items otherwise. In former annual reports the amount of the two older of these losses was stated as unavailable, and to it is herein added the other, on the ground that such a document should set forth in the fullest manner the true state of the public funds. Exclusive of the amount on deposit with the States, the total deficiency in the cash as compared with the amount charged to the Treasurer is \$1,415,433.91.

The established method of carrying these deficits, by which they are

ignored in some of the Treasury statements, and wholly or partly allowed for in others, is unsatisfactory and confusing, if not apt to encourage abuses. The Treasury ought not, by appearing to cover up losses, to practice and by its example seem to sanction what is ordinarily held to be imprudent, dishonest, or criminal. The public accounts should be so kept as at all times to show the actual state of affairs without real or apparent discrepancies. The Treasurer should not stand charged with sums which have passed out of the control of the Department, or for which he individually has never become responsible in any sense or capacity. When moneys disappear from the Treasury, unless they are at once restored, the cash accounts should be cleared of them, and the duty of keeping trace of them be transferred elsewhere, along with that of recovering losses and punishing negligence or crime. If alone to avoid confusion the statements issued from the Treasury should all be based upon the same understanding of the facts, and that the one requiring least explanation.

THE PUBLIC DEBT.

It will aid toward a clear understanding of the position of the Treasury with reference to existing obligations, and of the changes that took place therein during the fiscal year, to note the elements of which the public debt is composed, and their several relations to the public finances. As officially stated, the debt consists of the interest-bearing loans not yet due or payable; the legal-tender notes, redeemable on demand, and receivable on all accounts, but required by law to be reissued; the old demand notes and fractional currency, payable for retirement; and all other matured bonds, notes, and securities, together with all interest due and payable, or accrued but not yet due. Of these obligations, the principal represents borrowings on the public credit for past expenditures, and constitutes the debt, properly so called. The interest is taken account of on the Treasurer's books as a current liability, and when paid is reckoned an ordinary expenditure. To consider it as a part of the debt itself may be convenient if the total obligations of the Government are to be shown, but at the same time is confusing by bringing into prominence an item of running expense for which ample provision is made out of current revenues, while all other items of the same character are neglected. Lastly there are included as part of the debt the outstanding certificates of deposit, which do not represent borrowings, and do not bring any benefit to the Treasury, nor impose upon it any obligation save that of trusteeship.

The public debt, as understood by the Department, therefore includes all the liabilities of the Treasury, whether deferred, accrued, or matured, excepting only current expenses and the obligations arising from deposits with the Treasurer for the redemption of national-bank notes and for other purposes. These obligations, though no account of the receipt and disbursement of the funds from which they arise is kept elsewhere than in this office, and though the funds themselves are not considered part of the public moneys, are yet as valid against the assets in the Treasurer's hands as any liability on account of the debt. To make a full statement of the condition of the Treasury with reference to gross assets and liabilities on all accounts, and one which bears the simplest relation to the statements of cash and current obligations, it is necessary, therefore, to add to the items included in the debt those standing in the Treasurer's agency account. Such a statement, in summary, for

June 30, 1889, and the corresponding date in the year before, is as follows:

	June 30, 1888.	June 30, 1889.
Interest-bearing debt	\$1, 015, 146, 012. 00	\$894, 477, 502. 00
Old demand notes	56, 807. 50	56, 442. 50
United States notes	346, 681, 016. 00	346, 681, 016. 00
Fractional currency, estimated	6, 922, 643. 82	6, 916, 690. 47
Certificates of deposit	386, 420, 922. 00	433, 873, 298. 00
Matured debt	2, 496, 605. 26	1, 911, 485. 26
Interest due and unpaid	1, 667, 336. 85	1, 294, 049. 82
Accrued interest	10, 125, 136. 29	9, 434, 501. 51
Total debt	1, 769, 524, 969. 72	1, 694, 644, 985. 56
Treasurer's agency account	134, 205, 444. 50	116, 033, 489. 50
Aggregate	1, 903, 730, 414. 22	1, 810, 678, 475. 06
Assets of Treasury	764, 729, 535. 51	760, 643, 871. 26
Debt, less cash in Treasury	1, 139, 000, 878. 71	1, 050, 034, 603. 80

To show succinctly the state of the debt proper and the position of the Treasury with reference thereto, all items of current liability carried in the Treasurer's accounts, together with the equivalent amount of assets held against them, must be eliminated, and the principal of the various classes of obligations placed in comparison with the cash balance. It must be observed, however, that as the principal of the matured debt is taken up in the cash statement as a liability, the amount of it, if added to the other debt, where it properly belongs, must be added also to the balance of cash. With these changes the above statement is reduced to the following form:

	June 30, 1888.	June 30, 1889.
Interest-bearing debt	\$1, 015, 146, 012. 00	\$894, 477, 502. 00
United States notes	346, 681, 016. 00	346, 681, 016. 00
Old demand notes and fractional currency	6, 979, 451. 32	6, 973, 132. 97
Matured debt	2, 496, 095. 26	1, 911, 485. 26
Total principal of debt	1, 371, 302, 574. 58	1, 250, 043, 136. 23
Available cash balance	232, 301, 695. 87	200, 008, 532. 43
Principal, less cash in Treasury	1, 139, 000, 878. 71	1, 050, 034, 603. 80

From the foregoing it appears that the reduction of the principal of the debt proper was \$121,259,438.35. There were two items of increase, one of \$5,940, arising from the conversion of interest on refunding certificates into 4 per cent. bonds, and another of \$5,000, apparent only, resulting from the correction of an error, which had been carried along in the debt statement for a number of years, in the amount of 7-30 notes outstanding. The total application of moneys to the extinction of principal was therefore \$121,270,378.35. There was paid, in addition, \$17,292,362.65 as premium on bonds purchased, making a total expenditure of \$138,562,741. Of this sum, \$105,053,443.24 was derived from surplus revenues for the year, and \$33,509,297.76 was taken from cash in the Treasury. The purchases of bonds aggregated \$82,568,050 of 4½ per cents and \$38,106,400 of 4 per cents. The effect of the operations of the year upon the annual interest charge was a reduction of \$5,239,580.65.

THE CURRENCY.

The causes which for some time past have gradually been changing the composition of the circulating medium, produced their effect during the past fiscal year. Under the operation of the laws relating to silver about \$34,000,000 was added to the stock of that metal. The contraction of the national-bank circulation, brought about by the reduction of the bonded debt, amounted to \$41,000,000. But along with these changes, which have come to be ordinary, another made itself felt, for the first time recently, to a degree that left an impression upon the year's record. For the first time since gold began to be accumulated preparatory to the resumption of specie payments, the end of a fiscal year found the stock in the country less than it had been a twelvemonth before. The loss was \$25,750,000. This, though a considerable sum, is yet less than 4 per cent. of the amount in the country; and the fact of a loss itself lacks the significance which might attach to it under different circumstances. In searching for a cause it is perhaps unnecessary to look beyond the unusual crowds of Americans that have visited Europe the past season. Still, without these, it would not have been strange if a loss of gold had occurred, since the influx of that metal for some time had been greater than could be expected to be maintained, having amounted to \$115,000,000 in the two years preceding the last.

The metallic stock of the country, as estimated by the Director of the Mint, and the outstanding issues of paper, as shown by the records of this office, on June 30, 1888 and 1889, were as follows:

	June 30, 1888.	June 30, 1889.
Gold coin and bullion	\$705,818,855.00	\$680,063,505.00
Silver dollars and bullion	310,166,459.35	343,947,093.00
Fractional silver coin	76,406,376.00	76,601,836.00
Total coin and bullion	1,092,391,690.35	1,100,612,434.00
State-bank notes	230,806.00	201,170.00
Old demand notes	56,807.50	56,442.00
One and two year notes	63,835.00	62,955.00
Compound interest notes	189,530.00	185,750.00
Fractional currency, estimated	6,922,643.82	6,916,690.47
National-bank notes	252,368,321.00	211,378,963.00
United States notes	346,681,016.00	346,681,016.00
Certificates of deposit, act of June 8, 1872	14,915,000.00	17,195,000.00
Gold certificates	142,023,150.00	154,048,552.00
Silver certificates	229,491,772.00	262,629,746.00
Total paper currency	992,942,881.32	999,356,284.47
Aggregate	2,085,334,571.67	2,099,968,718.47

The following table shows the amounts of the several kinds of currency in the Treasury and in circulation:

	June 30, 1888.		June 30, 1889.	
	In Treasury.	In circulation.	In Treasury.	In circulation.
Gold	\$314,704,822.46	\$391,114,032.54	\$303,387,719.79	\$376,675,785.21
Silver	280,683,125.70	105,889,709.65	314,935,151.52	105,613,777.48
Old paper issues	1,357.92	7,462,264.40	1,094.76	7,421,912.71
National-bank notes	7,055,541.08	245,312,779.92	4,150,537.75	207,228,425.25
United States notes	53,345,975.89	293,335,040.11	47,296,875.54	299,384,140.46
Certificates of deposit, act of 1872	250,000.00	14,665,000.00	210,000.00	16,955,000.00
Gold certificates	20,928,500.00	121,094,650.00	36,918,323.00	117,130,229.00
Silver certificates	28,732,115.00	200,759,657.00	5,487,181.00	257,142,565.00
Total	705,701,438.05	1,379,633,133.62	712,416,883.36	1,387,551,835.11

From the face of the preceding statements it would appear that there was an increase both in the aggregate monetary supply and in the amount held by the people. The certificates of deposit are, however, merely representative of moneys in the Treasury, and to count them with the coin and notes to which they give title would be a duplication. If these be eliminated, and the actual moneys disposed according to ownership, the result will be as shown below :

	Outstanding.	In Treasury.	In circulation.
<i>June 30, 1888.</i>			
Gold	\$705,818,855.00	\$193,610,172.46	\$512,208,682.54
Silver	386,572,835.35	79,923,468.70	306,649,366.65
Notes	606,512,959.32	45,737,874.89	560,775,084.43
Total	1,698,904,649.67	319,271,516.05	1,379,633,133.62
<i>June 30, 1889.</i>			
Gold	680,063,505.00	186,257,490.79	493,806,014.21
Silver	420,548,929.00	57,792,586.52	362,756,342.48
Notes	565,482,986.47	34,493,508.05	530,989,478.42
Total	1,666,095,420.47	278,543,585.36	1,387,551,835.11

These figures make apparent a contraction of about \$33,000,000 in the currency, resulting from the changes already pointed out in the stock of gold, silver, and national-bank notes. In combination with this the \$41,000,000 paid out of the Treasury produced an increase of \$3,000,000 in the circulation. Of the losses, \$18,000,000 in gold and \$30,000,000 in notes were taken from the public, whose ownership of silver increased by \$56,000,000. The ratio of gold to the total stock of money was 41.5 per cent. at the beginning of the year and 40.8 at the close. In the active circulation the proportion of gold fell off from 37.1 to 35.6 per cent.

To show the significance of these facts, the supply of precious metals and of circulating notes other than certificates of deposit and the proportion of gold to the aggregate are given below for the same date in each of the past five years :

	1885.	1886.	1887.	1888.	1889.
Gold	\$588,697,036	\$590,774,461	\$654,520,335	\$705,818,855	\$680,063,505
Silver	283,478,787	312,252,833	352,990,599	386,572,835	420,548,929
Notes	672,793,236	665,691,618	633,489,036	606,512,959	565,482,986
Total	1,544,969,059	1,568,918,922	1,641,002,937	1,698,904,649	1,666,095,420
Per cent. of gold	38.1	37.7	39.9	41.5	40.8

The figures for the actual circulation are as follows :

	1885.	1886.	1887.	1888.	1889.
Gold	\$468,398,141	\$434,263,950	\$467,766,118	\$512,208,683	\$493,806,014
Silver	184,323,836	186,958,638	246,250,693	305,619,367	362,756,342
Notes	647,385,147	638,988,885	611,112,655	560,775,084	530,989,478
Total	1,300,107,124	1,260,211,673	1,325,129,376	1,379,633,134	1,387,551,834
Per cent. of gold	36.0	34.5	35.3	37.1	35.6

In becoming practically the sole issuer of currency, the Government has assumed the duty of supplying the needs of the public for a circulating medium. These needs are not the same from year to year or from season to season. The yearly changes depend upon the growth of the population and the development of business. Their effects are seen in the almost uninterrupted expansion of the currency since 1873, which has been the net result of the accumulation of gold, the purchase of silver, and the variations that have occurred from time to time in the volume of circulating notes. The means of responding to future changes of this character must be provided by legislation; and since the amount of the direct paper issues of the Government is fixed by law, while the national-bank circulation is affected by other considerations than the need for currency, and is at present threatened with absolute retirement, the monetary situation must before long claim the serious attention of Congress.

With the variations in the wants of the country produced by the demands of business in different seasons it falls largely upon the Treasury to deal. The movements produced each year by these causes are considerable, and it has been shown by experience that unless they are allowed free flow the business public or the Treasury, or both, will suffer embarrassment. Various ways have been tried in the past for aiding in the distribution of currency, particularly the smaller denominations, which takes place several times a year, being largest in the autumn months. Among the expedients adopted have been the sale of bills of exchange, effected at a profit over the cost of the transfer of funds necessary to meet them; the shipment of silver coin or certificates free of charge in return for gold deposited in New York; the shipment of paper currency, at the cost of the consignee, in exchange for other denominations sent to the Treasury, and the sale of circulating notes or certificates at a premium.

During the past season, which was unusually active, the plan was adopted of forwarding currency from Washington at the expense of the consignees, under the Government contract with the United States Express Company for the transportation of public moneys, in return for deposits with the Assistant Treasurer in New York. As comparatively little discrimination on account of distance is made in the rates fixed by the contract, this arrangement proved very satisfactory to the public as well as to the Treasury. The currency needed for the movement of the crops was amply and promptly supplied, with only some little embarrassment to the Treasury in providing the denominations asked for. This arrangement, however, has recently been terminated by the express company on the ground that such transportation does not come within the provisions of the contract.

It is important that the relations between the Treasury and the business public, particularly with regard to the facilities that ought to be provided for the delivery of currency at distant places and the return of worn notes for redemption, should be more definitely settled. Especially incumbent upon the Department is it to foresee the wants of the people in the way of circulating medium and to be always ready to meet any demand that may properly be made. The Treasurer should be kept well supplied with the various denominations of paper, to avoid the unnecessary difficulties which have often arisen from neglect of this obvious precaution. Perhaps the least defensible plea that could be opposed to his requisitions is that the notes can not be printed fast enough. As a means of keeping the circulation in good condition, of aiding in the prevention of losses by wear, of making the work of coun-

terfeiterers more difficult and their detection more certain, it would doubtless be a wise and popular measure to provide for the return of mutilated paper currency to the Treasury at the expense of the Government.

UNITED STATES NOTES.

In pursuance of the policy of limiting the smaller denominations of the paper currency to silver certificates and the larger to gold certificates, the volume of the legal tenders has been rapidly concentrated into notes of the medium sizes. None were issued the past year below ten or above one thousand dollars. The largest increase was in twenties.

The redemptions of worn and mutilated notes amounted to \$59,450,000, a degree of renovation not more than sufficient, according to the calculated average life of these notes, to keep the circulation in good condition. The redemptions at New York in gold were \$730,143. The table below shows the amounts of each denomination outstanding at the close of each of the last four fiscal years.

Denomination.	1886.	1887.	1888.	1889.
One dollar	\$17,603,922.40	\$8,797,376.50	\$5,180,232.50	\$3,714,527.90
Two dollars	18,204,369.60	9,008,872.00	4,976,936.00	3,351,293.60
Five dollars	85,629,219.00	95,064,850.50	81,054,872.50	58,334,960.50
Ten dollars	66,658,661.00	80,371,471.00	86,264,401.00	86,584,253.00
Twenty dollars	55,078,379.00	63,929,361.00	84,813,924.00	93,413,246.00
Fifty dollars	23,291,265.00	21,908,985.00	21,870,550.00	24,242,415.00
One hundred dollars	31,359,700.00	29,643,400.00	31,104,100.00	34,808,820.00
Five hundred dollars	12,424,000.00	7,704,500.00	8,068,000.00	14,499,500.00
One thousand dollars	37,361,500.00	31,197,500.00	24,303,000.00	28,687,000.00
Five thousand dollars	60,000.00	45,000.00	35,000.00	35,000.00
Ten thousand dollars	10,000.00	10,000.00	10,000.00	10,000.00
Total	347,681,016.00	347,681,016.00	347,681,016.00	347,681,016.00
Less unknown denominations destroyed in sub-treasury in Chicago fire	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00
Outstanding	346,681,016.00	346,681,016.00	346,681,016.00	346,681,016.00

CERTIFICATES OF DEPOSIT, ACT OF JUNE 8, 1872.

There was a good deal of activity in the issue and return of certificates of deposit for United States notes, without resulting in much change in the amount outstanding. The total issues and redemptions have been as follows:

Fiscal year.	Total issued.	Total redeemed.	Outstanding at close of fiscal year.	Fiscal year.	Total issued.	Total redeemed.	Outstanding at close of fiscal year.
1873.....	\$57,240,000	\$25,430,000	\$31,810,000	1882.....	\$629,760,000	\$616,400,000	\$13,360,000
1874.....	137,905,000	78,915,000	58,990,000	1883.....	649,790,000	636,610,000	13,180,000
1875.....	219,000,000	159,955,000	59,045,000	1884.....	676,660,000	664,430,000	12,230,000
1876.....	301,400,000	268,260,000	33,140,000	1885.....	733,215,000	703,930,000	29,285,000
1877.....	378,285,000	324,305,000	53,980,000	1886.....	780,263,000	762,755,000	18,110,000
1878.....	464,965,000	418,720,000	46,245,000	1887.....	815,765,000	806,745,000	9,020,000
1879.....	554,730,000	525,400,000	29,330,000	1888.....	839,875,000	825,210,000	14,665,000
1880.....	601,785,000	588,660,000	13,125,000	1889.....	878,215,000	861,860,000	16,355,000
1881.....	612,850,000	601,235,000	11,615,000				

GOLD CERTIFICATES.

To meet an urgent demand, a new issue of gold certificates, of the denominations of five and ten thousand dollars, payable to order, was begun in November, 1888, reaching \$48,000,000 by the end of the year, with \$45,000,000 outstanding. The greater favor with which this issue was received caused the return of \$31,000,000 of the certificates payable to bearer, so that, with the redemption of \$2,000,000 of the series of 1863, there was a net increase of \$12,000,000 in the total outstanding. The holdings of the Treasury, however, increased by \$16,000,000; hence the net result of the year's changes was a decrease of \$4,000,000 in the actual circulation. The issues and redemptions during the year, by denominations, are given in the following statement:

Denomination.	Outstand- ing June 30, 1888.	Issued.		Redeemed.		Outstand- ing June 30, 1889.
		During fiscal year.	To June 30, 1889.	During fiscal year.	To June 30, 1889.	
Twenty dollars.....	\$12,962,000	.....	\$21,040,000.00	\$1,982,898	\$10,060,898.00	\$10,979,102
Fifty dollars.....	10,245,150	.....	17,800,000.00	1,801,809	9,356,650.00	8,443,350
One hundred dollars.....	13,669,000	.....	40,234,300.00	2,021,900	28,587,200.00	11,647,100
Five hundred dollars.....	12,311,000	\$2,000,000	56,844,000.00	3,235,500	45,768,500.00	11,075,500
One thousand dollars.....	25,501,000	6,000,000	167,881,000.00	10,287,500	146,667,500.00	21,213,500
Five thousand dollars.....	23,865,000	30,155,000	530,540,000.00	17,020,000	493,540,000.00	37,000,000
Ten thousand dollars.....	43,470,000	41,120,000	470,450,000.00	30,900,000	416,760,000.00	53,690,000
Account Geneva award.....	.....	.....	33,000,580.46	.....	33,000,580.46	.....
Total	142,023,150	79,275,000	1,337,789,880.46	67,249,598	1,183,741,328.46	154,048,552

The aggregate transactions of the Treasury in these certificates, year by year, are shown below:

Fiscal year.	Issued during fiscal year.	Total issued.	Redeemed dur- ing fiscal year.	Total redeemed.	Outstanding at close of fiscal year.
1866	\$98,493,660.00	\$98,493,660.00	\$87,545,800.00	\$87,545,800.00	\$10,947,860.00
1867	109,121,620.00	207,615,280.00	101,295,900.00	188,841,700.00	18,773,580.00
1868	77,960,400.00	285,575,680.00	79,055,340.00	267,897,040.00	17,678,640.00
1869	80,663,160.00	306,238,840.00	65,255,620.00	333,152,660.00	33,086,180.00
1870	76,731,000.00	442,969,900.00	75,270,120.00	408,422,780.00	34,547,120.00
1871	56,577,000.00	499,546,900.00	71,237,820.00	479,660,600.00	19,886,300.00
1872	63,229,500.00	562,776,400.00	51,029,500.00	530,690,100.00	32,086,300.00
1873	55,570,500.00	618,346,900.00	48,196,800.00	578,886,900.00	30,460,000.00
1874	81,117,780.46	699,464,680.46	97,752,680.46	676,639,580.46	22,825,100.00
1875	70,250,100.00	769,714,780.46	71,278,900.00	747,918,480.46	21,796,300.00
1876	90,619,100.00	860,333,880.46	83,734,000.00	831,652,480.46	28,681,400.00
1877	58,141,200.00	918,475,080.46	45,250,000.00	876,902,480.46	41,572,600.00
1878	50,342,400.00	968,817,480.46	47,548,000.00	924,450,480.46	44,367,000.00
1879	12,317,400.00	981,134,880.46	41,270,700.00	965,721,180.46	15,413,700.00
1880 .....	.....	981,134,880.46	7,409,100.00	973,130,280.46	8,004,600.00
1881 .....	.....	981,134,880.46	2,221,680.00	975,351,960.46	5,782,920.00
1882 .....	.....	981,134,880.46	745,000.00	976,097,760.46	5,037,120.00
1883	86,710,000.00	1,067,844,880.46	9,368,480.00	985,466,240.46	82,378,640.00
1884	41,470,000.00	1,109,314,880.46	25,455,980.00	1,010,922,220.46	98,392,660.00
1885	63,000,000.00	1,172,314,880.46	21,069,520.00	1,031,991,740.46	140,323,140.00
1886	1,040,000.00	1,173,354,880.46	10,188,995.00	1,042,180,635.46	131,174,245.00
1887 .....	.....	1,173,354,880.46	9,687,428.00	1,051,868,063.46	121,486,817.00
1888	85,160,000.00	1,258,514,880.46	64,623,667.00	1,116,491,730.46	142,023,150.00
1889	79,275,000.00	1,337,789,880.46	67,249,598.00	1,183,741,328.46	154,048,552.00

SILVER CERTIFICATES.

The increase in the circulation of silver certificates has kept pace with the rate for the two previous years, being about \$56,000,000. Of this sum \$33,000,000 was in new issues and \$23,000,000 was taken from the cash in the Treasury. The total increase of \$169,000,000 in

three years, against a coinage of \$100,000,000, has practically taken up the margin of free coin in the Treasury, so that in future, unless there is a considerable return of certificates, the supply will practically be limited by the purchases of silver.

It appears that the new issues of the denomination of twenty dollars and under have fully met the needs of the country, so long an embarrassment to the Treasury, for small bills. No further difficulty is apprehended in furnishing any denominations of certificates that may be wanted, within the limit, of course, of the total issue authorized by law.

The following table shows the course of the issues and redemptions during the year:

Denomination.	Outstanding June 30, 1888.	Issued.		Redeemed.		Outstanding June 30, 1889.
		During fiscal year.	To June 30, 1889.	During fiscal year.	To June 30, 1889.	
One dollar	\$26, 731, 604	\$8, 772, 000	\$37, 100, 000	\$7, 595, 632. 20	\$9, 192, 028. 20	\$27, 907, 971. 80
Two dollars	18, 597, 238	5, 800, 000	25, 200, 000	4, 159, 572. 80	4, 962, 334. 80	20, 237, 665. 20
Five dollars	51, 609, 860	38, 540, 000	91, 000, 000	4, 570, 120. 00	5, 420, 260. 00	85, 579, 740. 00
Ten dollars	80, 465, 510	20, 480, 000	149, 274, 000	13, 508, 887. 00	61, 837, 377. 00	87, 436, 623. 00
Twenty dollars	43, 840, 160	160, 000	83, 746, 000	8, 890, 544. 00	48, 636, 384. 00	35, 109, 616. 00
Fifty dollars	4, 391, 600	.....	12, 050, 000	932, 790. 00	8, 591, 190. 00	3, 458, 810. 00
One hundred dollars	3, 053, 300	.....	14, 140, 000	727, 480. 00	11, 814, 180. 00	2, 325, 820. 00
Five hundred dollars	480, 500	.....	13, 650, 000	134, 000. 00	13, 303, 500. 00	346, 500. 00
One thousand dollars	322, 000	.....	23, 490, 000	95, 000. 00	23, 263, 000. 00	227, 000. 00
Total	229, 491, 772	73, 752, 000	449, 650, 000	40, 614, 026. 00	187, 020, 254. 00	262, 629, 746. 00

Both in aggregate volume and in actual circulation these certificates now exceed every other kind of paper money except United States notes. The following table shows the total issues and redemptions, with the amounts outstanding, for each year since 1878:

Fiscal year.	Issued during fiscal year.	Total issued.	Redeemed during fiscal year.	Total re-deemed.	Outstanding at close of fiscal year.
1878	\$1, 850, 410	\$1, 850, 410	.....	.....	\$1, 850, 410
1879	9, 149, 590	11, 000, 000	\$8, 460, 050	\$8, 460, 050	2, 539, 950
1880	10, 018, 000	21, 018, 000	183, 680	8, 643, 730	12, 374, 270
1881	40, 912, 000	61, 930, 000	2, 119, 740	10, 763, 470	51, 166, 530
1882	24, 300, 000	86, 230, 000	9, 369, 820	20, 133, 290	66, 096, 710
1883	35, 040, 000	121, 270, 000	12, 519, 879	32, 653, 169	88, 616, 831
1884	52, 280, 000	173, 550, 000	20, 005, 140	52, 658, 309	120, 891, 691
1885	40, 000, 000	213, 550, 000	20, 990, 045	73, 648, 354	139, 901, 646
1886	4, 600, 000	218, 150, 000	28, 523, 971	102, 172, 325	115, 977, 675
1887	51, 852, 000	270, 002, 000	22, 286, 525	124, 458, 850	145, 543, 150
1888	105, 896, 000	375, 898, 000	21, 947, 378	146, 406, 228	229, 491, 772
1889	73, 752, 000	449, 650, 000	40, 614, 026	187, 020, 254	262, 629, 746

STANDARD SILVER DOLLARS.

There has been no incident worthy of special note in connection with the coinage of the standard silver dollars. The futility of all efforts to force the coins into circulation having been demonstrated by former experience, no extraordinary inducements to take them have recently been held out to the public. The changes in the amounts outstanding have been unimportant, but the tendency has been toward a falling off in the actual circulation. The amounts issued and returned and the expenses of distribution have been about as usual, but in consequence of the shipments necessary for storage, the total cost of handling has

recently been heavy. Since the expenditure borne by the Treasury in distributing the dollars to the public has ceased to increase the circulation, and consequently has become a needless outlay, it might be worth while to consider whether it would not be as well to stop this expense, and place these coins, together with the fractional silver, on the same basis as the other currency with reference to the mode of issue. To require consignees of silver to bear the cost of transportation might result in a decrease of the circulation, but the change could not be great. On the other hand, the coins would have the advantage of being held by the Government strictly on a par with the other currency. If to obtain them from the Treasury involved cost, they would perhaps not be so readily parted with. Hence the effect upon the circulation might be exactly the opposite to the one apparently regarded as certain. At all events, the Treasury would effect an important saving, and the anomalous discrimination against the credit of the silver coinage would be removed, without giving the public any cause for complaint.

The aggregate coinage and movement of standard silver dollars are shown in the following table:

Fiscal year.	Annual coinage.	Total coinage.	On hand at close of year.	Net distribution during year.	Outstanding at close of year.	Percentage of annual coinage distributed.	Percentage of total coinage outstanding.
1878	\$8, 573, 500	\$8, 573, 500	\$7, 718, 357	\$855, 143	\$855, 143	9.9	9.9
1879	27, 227, 500	35, 801, 000	28, 147, 351	6, 798, 606	7, 653, 649	24.9	21.3
1880	27, 933, 750	63, 734, 750	44, 425, 315	11, 655, 786	19, 309, 435	41.7	30.2
1881	27, 637, 955	91, 372, 705	62, 544, 722	9, 518, 549	28, 827, 983	34.4	31.5
1882	27, 772, 075	119, 144, 780	87, 153, 816	3, 162, 981	31, 990, 904	11.3	26.8
1883	28, 111, 119	147, 255, 899	111, 914, 019	3, 350, 916	35, 341, 880	11.9	24.0
1884	28, 099, 930	175, 355, 829	135, 560, 916	4, 453, 033	39, 794, 913	15.8	22.6
1885	28, 528, 552	293, 884, 381	165, 113, 112	-1, 323, 644	38, 471, 269	.....	18.8
1886	29, 638, 905	233, 723, 286	181, 253, 566	13, 998, 451	52, 469, 720	46.9	22.4
1887	32, 266, 831	266, 990, 117	211, 483, 970	3, 036, 427	55, 506, 147	9.1	20.7
1888	32, 434, 673	299, 424, 790	243, 879, 487	39, 156	55, 545, 303	0.1	18.5
1889	33, 997, 860	333, 422, 650	279, 084, 683	-1, 207, 336	54, 337, 967	.....	16.3

FRACTIONAL SILVER COIN.

The existing redundancy of subsidiary silver coin, shown by the large amounts the Treasury has had to carry, was produced by the re-appearance of the old pieces in the circulation after the resumption of specie payments, along with the coinage substituted in the place of fractional currency under the law of 1875. The excess of the present stock over actual needs is considerable, but it is confined to the larger denominations, the supply of dimes having had to be maintained by new coinage.

Since the accumulation of these coins in the Treasury reached the highest point, in 1885, there has been a constant outflow, interrupted only by the fluctuations common to the whole currency at different seasons of the year. Taking into account the new coinage of dimes, which since the redemption of the trade-dollars has been supplied at a large profit from the metal so obtained, there have been absorbed permanently into the circulation during the past four years on an average about \$2,000,000 of fractional silver per annum. As this seems to have been a natural consequence of the growth of the country and the development of business, there are good reasons for believing that with judicious management the whole of the present stock of metal in these coins may in a few years be put into active circulation. With a view to such an end, desirable as it would be for various reasons, the Treasury should be always prepared to take advantage of applications for

new coins, which are much better liked than those showing evidences of wear, and the demands which spring up from time to time for a particular denomination, as an opportunity for working off the old and uncurrent stock on hand. With the aid of the recent appropriations for recoinage a considerable advance has been made, both in the increase of the circulation and in the way of ridding the vaults of obsolete and unpopular pieces. As the subsidiary coins have been a source of profit to the Government, and as they are not useful for purposes of export, nor for any other as money when much worn, there is every reason why they should be kept in good condition and not allowed to accumulate beyond practical needs.

The amounts of the different denominations in the Treasury on June 30, 1889, are shown in the following table:

Office.	Fifty cents.	Twenty-five cents.	Twenty cents.	Ten cents.	Five cents.	Three cents.	Unas-sorted.
Treasurer U. S., Washington.....	\$1,448,140.00	\$634,640.00	\$5.20	\$11,085.00	\$92.15	\$8.10	\$39,141.16
Assistant treasurer U. S.:							
Baltimore.....	371,950.00	88,450.00	50.00	54,950.00	700.00	90.00	13,741.85
Boston.....	447,147.00	172,736.00	200.00	31,574.60	1,200.00	120.00	64,732.00
Chicago.....	937,000.00	341,000.00	.....	17,000.00	.....	.....	84,596.00
Cincinnati.....	185,436.00	181,250.00	140.00	18,200.00	924.00	50.00	.....
New Orleans.....	305,000.00	271,650.00	65.60	11,555.00	647.15	8.25	698.71
New York.....	8,151,000.00	1,416,000.00	.....	96,000.00	.....	.....	75,049.49
Philadelphia.....	662,000.00	289,000.00	100.00	13,000.00	500.00	.....	201,175.89
San Francisco.....	6,553,955.00	154,392.25	337.60	20,718.30	2,418.10	900.00	.....
St. Louis.....	1,063,900.00	265,350.00	125.00	29,000.00	620.00	18.00	45,796.41
U. S. Mint:							
Carson City.....	511.00	83.25	.....	192.74	.....	.....	.....
Philadelphia.....	4,534.00	1,100.00	.....	704.87	.....	.....	.....
San Francisco.....	.....	281,610.50	.....	74,100.50	.....	.....	.....
U. S. Assay Office:							
New York.....	.....	1.25	.....	.80	.....	.....	.....
St. Louis.....	.....	2.75	.....	.....	.....	.....	.....
In transit.....	.....	.....	.....	.....	.....	.....	.80
Total.....	20,130,573.00	4,097,266.00	1,023.40	378,081.81	7,101.40	1,194.35	524,932.31

MINOR COIN.

The minor-coin circulation continues in good condition and convenient supply. The Treasury stock at the close of the fiscal year was as follows:

Office.	Five cents.	Three cents.	Two cents.	One cent.	Unas-sorted.	Total.
Treasurer United States, Washington.....	\$8,225.00	\$42.00	.....	\$2,865.00	\$862.51	\$11,994.51
Assistant treasurer United States:						
Baltimore.....	2,300.00	60.00	\$23.00	8,560.00	87.63	11,027.63
Boston.....	6,335.00	90.00	25.00	3,555.53	1,593.01	11,598.54
Chicago.....	24,850.00	.....	.....	9,600.00	350.91	34,800.91
Cincinnati.....	5,472.00	133.00	39.00	380.00	.11	6,024.11
New Orleans.....	150.00	54.27	49.82	93.30	.....	347.39
New York.....	31,170.00	300.00	50.00	29,760.00	373.25	61,653.25
Philadelphia.....	2,500.00	.....	80.00	2,520.00	1,931.75	7,031.75
San Francisco.....	6,241.95	223.23	125.50	1,512.22	.....	8,102.90
St. Louis.....	7,200.00	.....	.....	.....	164.22	7,364.22
U. S. Mint, Philadelphia.....	.....	.....	.....	.....	65,681.54	65,681.54
U. S. Assay Office:						
Denver.....	.....	.....	.....	.....	.29	.29
New York.....	.....	.....	.....	.....	.28	.28
St. Louis.....	.....	.....	.....	.....	.74	.74
Total.....	94,443.95	902.50	389.32	58,846.05	71,046.24	225,628.06

RECOINAGE OF UNCURRENT COINS.

Worn and mutilated silver coins of the nominal value of \$542,937.32 were transferred to the Mint for recoinage, at a net loss of \$19,884.62, which was covered by the appropriation of \$20,000. The product was put into dimes, for which there has been a constant demand. There were also transferred \$80,602.94 of minor coins to be recoined or cleaned.

The silver recoined was as follows:

Denomination.	Amount.
Fifty cents.....	\$235,682.00
Twenty-five cents.....	222,920.00
Twenty cents.....	1,332.60
Ten cents.....	34,755.00
Five cents.....	11,731.30
Three cents.....	889.42
Total fractional silver coin.....	507,310.32
One dollar.....	35,627.00
Aggregate.....	542,937.32

MUTILATED, STOLEN, AND COUNTERFEIT CURRENCY.

The condition of the currency, as observed at the offices of the Treasury, shows a continuation of the improvement noted last year. With aggregate handlings of paper money but slightly less, and of silver coin considerably greater, the number of spurious pieces found was proportionately smaller than in the preceding twelve months. The following is the record of counterfeit paper currency for the year:

Denomination.	United States notes.	Silver certificates.	National bank notes.	Compound-interest notes.	Total.
One dollar.....	\$3	\$43	.....	.....	\$51
Two dollars.....	56	.....	\$38	.....	94
Five dollars.....	375	100	560	.....	1,035
Ten dollars.....	780	.....	540	.....	1,320
Twenty dollars.....	1,060	.....	620	.....	1,680
Fifty dollars.....	1,200	.....	50	\$50	1,300
One hundred dollars.....	100	.....	500	200	800
Total.....	3,579	143	2,308	250	6,280

The receipts of silver coin and the number of counterfeits are shown below:

Denomination.	Amount received.	Number of counterfeits.
Standard dollars.....	\$59,667,436.00	2,867
Half dollars.....	7,361,934.50	558
Quarter dollars.....	6,551,806.50	435
Total.....	73,581,197.00	3,860

The deductions from the face value of mutilated paper currency amounted to \$6,848.96. By a regulation published in the circular of July 11, 1889, the methods of valuing fragmentary notes and certificates were changed, so as to allow full payment for all pieces consisting clearly of three-fifths of the original paper. Where less than this proportion is presented, provided however there be two-fifths or more of the whole, the owner is allowed one-half of the face value. This arrange-

ment, which puts all the paper circulation practically upon the same basis in this respect, and which appears to be accepted with satisfaction by the public, is intended to insure the full payment of all notes and certificates issued, so far as is consistent with safe administration.

FRACTIONAL CURRENCY.

The redemptions of fractional currency during the year amounted to \$5,953.35. The course of the redemptions since the issue ceased is shown in the following table:

Fiscal year.	Amount.	Fiscal year.	Amount.
1877.....	\$14, 043, 458. 05	1884.....	\$20, 629. 50
1878.....	3, 855, 368. 57	1885.....	15, 885. 43
1879.....	705, 158. 66	1886.....	10, 088. 36
1880.....	251, 717. 41	1887.....	7, 123. 15
1881.....	109, 001. 05	1888.....	7, 400. 00
1882.....	58, 705. 55	1889.....	5, 953. 35
1883.....	46, 556. 96		

In the appendix are given tables showing the amounts of each denomination and issue redeemed, beginning with the first year after the last notes were paid out.

RECEIPTS FROM CUSTOMS AT NEW YORK.

The record of the kinds of money received at the New York custom-house, begun some years since as a convenient means of noting the character of the active circulation, and, in particular, of observing the proportion of gold and silver coming into the Treasury, has been continued, and the usual summary is given below. These receipts now consist substantially altogether of legal-tender notes and gold certificates, the proportion of other moneys having been less the past year than in any previous one since the record has been kept.

Period.	United States notes.	Per ct.	Gold coin.	Per ct.	Gold certificates.	Per ct.	Silver certificates.	Per ct.	Silver coin.	Per ct.	Total receipts.
Fiscal year											
1881.....	\$11, 791, 000	8.8	\$3, 556, 000	2.7	\$83, 750, 000	66.4	\$20, 482, 000	22.0	\$134, 000	0.1	\$133, 713, 000
Fiscal year											
1885.....	36, 161, 000	29.9	1, 541, 000	1.2	42, 779, 000	34.1	44, 660, 000	35.6	158, 000	0.1	125, 302, 000
Fiscal year											
1886.....	59, 519, 000	14.9	941, 000	0.7	51, 343, 000	41.0	17, 401, 000	13.1	390, 500	0.3	132, 627, 500
Fiscal year											
1887.....	39, 939, 500	27.3	1, 250, 750	0.9	86, 887, 000	59.5	17, 561, 000	12.0	468, 750	0.3	146, 116, 000
Fiscal year											
1888.....	16, 768, 000	11.6	1, 313, 200	0.9	110, 227, 484	76.4	15, 628, 000	10.8	470, 800	0.3	144, 407, 484
1888.											
July.....	1, 152, 300	8.1	61, 100	0.4	11, 754, 488	83.0	1, 171, 500	8.3	24, 100	0.2	14, 163, 486
August.....	870, 100	6.3	73, 500	0.5	12, 136, 923	87.6	764, 537	5.5	15, 900	0.1	13, 860, 960
September.....	714, 600	5.9	47, 700	0.4	10, 819, 032	89.1	529, 406	4.4	27, 950	0.2	12, 138, 688
October.....	745, 700	6.3	50, 850	0.4	10, 724, 958	89.5	433, 800	3.6	23, 130	0.2	11, 978, 438
November.....	667, 450	6.9	25, 780	0.3	8, 385, 807	87.2	515, 300	5.4	16, 100	0.2	9, 610, 437
December.....	1, 004, 900	9.2	19, 585	0.2	9, 469, 710	86.3	455, 300	4.1	16, 950	0.2	10, 966, 445
1889.											
January.....	1, 487, 150	10.6	14, 491	0.1	11, 655, 954	83.0	866, 350	6.2	13, 680	0.1	14, 037, 625
February.....	1, 220, 000	9.4	13, 133	0.1	11, 020, 694	85.1	691, 400	5.3	9, 403	0.1	12, 954, 630
March.....	1, 237, 900	9.2	14, 203	0.1	11, 740, 480	87.5	412, 600	3.1	17, 328	0.1	13, 422, 511
April.....	988, 400	8.3	17, 198	0.1	10, 624, 281	88.8	315, 140	2.7	17, 134	0.1	11, 962, 153
May.....	1, 365, 200	12.3	17, 590	0.2	9, 047, 334	81.5	655, 150	5.9	11, 517	0.1	11, 096, 791
June.....	2, 013, 510	18.8	14, 880	0.1	7, 968, 814	74.5	690, 690	6.5	9, 822	0.1	10, 697, 716
Fiscal year											
1889.....	13, 467, 210	9.2	370, 010	0.3	125, 348, 473	85.3	7, 501, 173	5.1	203, 014	0.1	146, 889, 880

CLEARING-HOUSE TRANSACTIONS.

Owing to the larger operations of the Treasury, the transactions with the clearing-house in New York were unusually heavy, the total volume having exceeded that of any previous year. The following statement of receipts and payments through this channel is given in continuation of tables published in former reports:

Period.	Checks sent to clearing-house.	Checks received from clearing-house.	Balances due assistant treasurer.	Balances due clearing-house.
Fiscal year 1884.....	\$116,666,000.26	\$295,541,943.22	\$1,331,880.02	\$180,207,828.08
Fiscal year 1885.....	109,420,072.25	278,830,720.11	694,284.08	170,104,931.94
Fiscal year 1886.....	125,782,520.54	276,855,487.30	1,643,279.86	152,716,246.63
Fiscal year 1887.....	116,671,928.64	353,470,901.64	181,409.57	236,980,382.60
Fiscal year 1888.....	99,399,535.24	337,849,743.13	382,681.63	238,832,889.52
1888.				
July.....	9,830,204.30	30,192,607.59		20,362,403.29
August.....	10,273,561.88	28,614,545.60		18,340,983.72
September.....	10,485,683.11	53,056,953.48		42,568,270.37
October.....	12,023,930.06	52,272,571.21		40,248,641.18
November.....	9,918,115.71	25,707,727.13		15,789,611.42
December.....	12,342,375.91	32,903,230.24	1,422,894.17	21,983,748.50
1889.				
January.....	13,893,325.24	39,741,346.97		25,848,021.73
February.....	12,501,350.12	20,592,857.29	846,064.19	18,847,571.36
March.....	12,284,610.12	33,640,692.49		21,356,082.37
April.....	9,114,725.88	37,905,418.28		28,790,692.40
May.....	10,438,587.67	28,577,420.79		18,143,833.12
June.....	8,914,534.39	31,224,279.91		22,309,745.52
Fiscal year 1889.....	132,109,004.39	424,429,651.01	2,268,958.36	294,589,604.98

NATIONAL BANKS.

There was a decrease of \$41,097,200 in the amount of bonds held in trust for the national banks, resulting from the withdrawal of \$66,340,900 and the deposit of \$25,243,700. Of the decrease, \$30,191,200 was in those held as security for circulation, and \$10,906,000 in those held as security for public moneys. There remained on deposit at the close of the year \$148,121,450, belonging to 3,262 banks, for the former purpose, and \$45,222,000, belonging to 270 banks, for the latter. The number of active banks was increased by 134, and the number of depositaries was decreased by 20, during the year. The amount of each kind of bonds on deposit June 30, 1889, and the purpose for which they were held, are shown in the following table:

Class of bonds.	Rate per cent.	To secure circulation, face value.	To secure public moneys.		Total face value.
			Face value.	Market value.	
Bonds issued to Pacific railroads....	6	\$4,324,000	\$1,403,000	\$1,795,840	\$5,727,000
Funded loan of 1891.....	4½	42,409,900	10,849,500	11,581,841	53,259,400
Funded loan of 1907.....	4	101,387,550	32,969,500	42,365,807	134,357,050
Total.....		148,121,450	45,222,000	55,743,488	193,343,450

The popularity of the national banking system and the contraction of the bonded public debt have produced two antagonistic movements—the growth of the number of banks, and the diminution of their aggre-

gate deposits of bonds as security for circulation. In the last ten years the number of active banks has increased nearly 60 per cent., while the amount of bonds held to secure circulation has decreased in about the same proportion. The two movements can not go on much longer, unless the relations between the capital of banks and the deposit of bonds required are changed by legislation. The minimum limit of bonds fixed by existing laws for the present capital of the banks is only fifty or sixty millions below the amount now on deposit, and of course is raised year by year with the increase of the number of banks and the amount of their capital. The following table exhibits the number of banks and of depositaries, together with the bonds held for them by the Treasury at the end of each fiscal year:

Fiscal year.	Number of banks.	Number of depositaries.	Bonds held to secure circulation.	Bonds held to secure public funds.	Total of bonds held.
1862	26	-----	\$1,185,750	-----	\$1,185,750
1864	467	204	44,266,900	\$30,009,750	74,276,650
1865	1,294	330	235,989,700	32,707,500	268,697,200
1866	1,634	382	327,310,350	38,177,500	365,487,850
1867	1,636	385	340,607,500	39,177,950	379,785,450
1868	1,640	370	341,495,900	38,517,950	380,013,850
1869	1,619	276	342,851,600	25,423,350	368,274,950
1870	1,612	148	342,278,550	16,072,500	358,351,050
1871	1,723	159	359,885,550	15,536,500	375,422,050
1872	1,853	163	380,440,700	15,329,000	395,769,700
1873	1,968	158	390,410,550	15,210,000	405,620,550
1874	1,983	154	391,171,200	15,390,200	406,561,400
1875	2,076	145	376,314,500	14,547,200	390,861,700
1876	2,091	143	341,394,750	14,578,000	355,972,750
1877	2,078	145	338,713,600	15,377,000	354,090,600
1878	2,056	124	349,546,400	13,858,000	363,404,400
1879	2,048	127	354,254,600	14,421,400	368,676,000
1880	2,076	131	361,652,050	14,777,000	376,429,050
1881	2,115	130	360,505,900	15,295,500	375,801,400
1882	2,239	134	360,722,700	15,925,000	376,647,700
1883	2,417	140	356,596,500	17,116,000	373,712,500
1884	2,625	135	334,147,850	17,060,000	351,207,850
1885	2,689	132	312,145,200	17,607,000	329,752,200
1886	2,809	160	275,974,800	19,659,900	295,634,700
1887	3,014	200	191,966,700	26,485,500	218,452,200
1888	3,128	290	178,312,650	56,128,000	234,440,650
1889	3,262	270	148,121,450	45,222,000	193,343,450

The amount of public moneys held by depositary banks ran down during the year from \$58,712,511.11 to \$47,259,714.39, the result mainly of the voluntary acts of the banks in surrendering the deposits and withdrawing the bonds held as security. The movement took place between the months of September and March, a period during which also large amounts of bonds held as security for circulation were withdrawn. Of the deposits remaining at the close of the year, \$43,203,323.97 stood to the credit of the Treasurer and \$4,056,390.42 to the credit of disbursing officers.

The following table exhibits, by fiscal years, the amount of the receipts of public moneys by depositary banks, of the funds transferred to and from them, of the drafts drawn on them, and of the balances standing charged to them at the end of each year. The discrepancies between the balances given and those reported as assets of the Treasury arise from differences in methods of statement. The table shows the transactions between the banks and the Treasurer only, credit being given for drafts when they are drawn, and no allowance being made for unavailable funds, of which \$214,761.38 are carried in the accounts. In the statements of assets and liabilities the amount standing to the credit of

disbursing officers are included, the unpaid drafts are treated as a liability, and the unavailable items are thrown out.

Fiscal year.	Receipts.	Funds transferred to depositary banks.	Funds transferred to Treasury by depositary banks.	Drafts drawn on depositary banks.	Balance.
1864 ...	\$153,393,108.71	\$816,000.00	\$85,507,674.08	\$28,726,695.88	\$39,976,738.75
1865 ...	987,564,639.14	8,110,294.70	583,697,912.72	415,887,767.81	36,065,992.06
1866 ...	497,566,676.42	13,523,972.62	363,085,565.65	149,772,756.11	31,298,319.34
1867 ...	351,737,083.83	8,407,963.63	331,039,872.57	37,218,612.76	26,182,821.47
1868 ...	225,244,144.75	9,404,392.00	215,311,460.69	22,218,187.92	23,301,709.61
1869 ...	105,160,573.67	10,052,199.44	114,748,877.24	14,890,463.75	8,875,141.73
1870 ...	120,084,041.79	2,466,521.06	111,123,926.18	11,818,228.61	8,483,549.79
1871 ...	99,299,840.85	2,633,129.45	89,428,544.04	13,790,961.01	7,197,015.04
1872 ...	106,104,855.16	3,050,444.05	94,938,603.76	13,635,837.49	7,777,873.00
1873 ...	169,602,743.98	9,004,842.49	108,089,786.76	16,110,519.07	62,185,153.64
1874 ...	91,108,846.70	2,729,958.81	134,869,112.57	13,364,554.52	7,790,292.06
1875 ...	98,228,249.53	1,737,445.60	82,184,304.05	13,657,678.25	11,914,004.89
1876 ...	97,402,227.57	2,445,451.49	89,981,146.99	13,909,616.83	7,870,920.13
1877 ...	106,470,261.22	2,353,196.29	94,276,400.35	14,862,200.88	7,555,776.41
1878 ...	99,781,053.48	2,385,920.38	90,177,963.35	12,606,870.60	6,937,916.32
1879 ...	109,397,525.87	6,890,489.06	100,498,469.29	15,544,058.34	7,183,403.42
1880 ...	119,495,171.94	6,489,634.17	109,641,232.64	15,525,023.03	7,999,953.86
1881 ...	131,820,002.20	5,645,092.46	118,143,724.91	18,388,772.82	8,933,550.79
1882 ...	143,261,541.41	5,256,574.29	129,131,305.07	18,709,928.56	9,610,432.86
1883 ...	145,974,256.88	5,292,840.22	132,075,358.80	18,771,472.81	10,030,698.33
1884 ...	129,100,449.35	5,501,161.18	116,227,722.17	17,688,442.52	10,716,144.17
1885 ...	119,056,058.94	4,798,782.35	105,952,609.09	17,633,235.03	10,885,141.34
1886 ...	123,592,221.68	8,786,546.55	112,862,815.24	16,464,462.15	14,036,632.18
1887 ...	128,482,769.20	11,476,372.92	118,372,954.27	16,432,743.24	19,190,076.79
1888 ...	132,591,946.77	80,082,442.39	161,168,708.67	15,782,267.54	54,913,489.74
1889 ...	139,316,214.49	20,723,547.15	152,338,700.22	19,309,039.25	43,305,511.91
Total..	4,730,836,505.31	240,064,154.75	3,944,874,751.37	982,720,396.78	.....

SEMI-ANNUAL DUTY.

The sums paid into the Treasury by the national banks as semi-annual duty for the fiscal year aggregated \$1,410,331.84, a falling off of \$205,795.69 from the previous year, due to the contraction of the circulation on which this tax is levied. The total amount of the duty paid since the organization of the national banking system is \$137,664,135.57, of which \$68,868,180.67 was assessed on circulation, \$60,940,067.16 on deposits, and \$7,855,887.74 on capital.

PACIFIC RAILROAD SINKING FUNDS.

First-mortgage Pacific railroad bonds of the face value of \$823,000 were added during the year to the sinking fund of the Union Pacific Railroad, and \$314,000 to that of the Central Pacific Railroad. The securities held for these funds at the close of the year are described in the following table:

Class of bonds.	Rate per cent.	For Union Pacific Railroad Company.	For Central Pacific Railroad Company.
Bonds issued to Pacific railroads	6	\$1,043,000	\$2,548,000
United States funded loan of 1907	4	4,478,650	.....
Union and Central Pacific Railroad first-mortgage thirty-year bonds	6	2,018,000	666,000
Total.....	.....	7,539,650	3,214,000

INDIAN TRUST FUNDS.

In pursuance of instructions from the Secretary of the Interior in his letter of November 12, 1888, \$37,000 of the bonds of the State of North Carolina and \$3,000 of the bonds of the State of South Carolina were transferred from the Indian trust fund to the United States and deposited for account of the Secretary of the Treasury, for whom they are now held. No other changes have been made in these funds. The securities held for them are described in the table below. All the States are in default for principal and interest, excepting Maryland. The interest on the bonds of that State is paid as it matures.

Class of bonds.	Registered.	Coupon.	Total.
STATE AND CANAL BONDS.			
Arkansas, funded debt		\$168,000	\$168,000.00
Florida, State stocks		132,000	132,000.00
Louisiana, State stocks		37,000	37,000.00
Maryland, State stocks	\$8,350.17		8,350.17
North Carolina, State stocks		155,000	155,000.00
South Carolina, State stocks		122,000	122,000.00
Tennessee, State stocks	191,666.66 $\frac{2}{3}$	123,000	314,666.66 $\frac{2}{3}$
Virginia, State stocks	540,000.00		540,000.00
Virginia, Chesapeake and Ohio Canal bonds		1,000	1,000.00
UNITED STATES BONDS.			
Bonds issued to Pacific railroads	280,000.00		280,000.00
Total	1,020,016.83 $\frac{2}{3}$	738,000	1,758,016.83 $\frac{2}{3}$

DISTRICT OF COLUMBIA TRUST FUNDS.

Securities as described below are held for the District of Columbia :

Class of securities.	Contract- ors' guaranty fund.	Metropol- itan police fund.	Firemen's relief fund.	Miscellane- ous.	Total.
District of Columbia 3.65 per cents. .	\$27,000	\$28,000	\$1,000		\$56,000.00
United States 4 per cents. .	188,650	2,550	950		142,150.00
United States 4 $\frac{1}{2}$ per cents. .	850				850.00
Unsigned District of Columbia 3.65 per cents. .				\$1,530,000.00	1,530,000.00
Board of audit certificates				20,134.72	20,134.72
Chesapeake and Ohio Canal bonds ..				84,285.00	84,285.00
Total	166,500	30,550	1,950	1,634,419.72	1,833,419.72

CAPTURED AND ABANDONED PROPERTY.

In accordance with instructions from the Secretary of the Treasury pursuant to a judgment of the Court of Claims rendered May 13, 1889, and certified to him under the provisions of the act of Congress approved March 3, 1887, the three swords formerly belonging to General David B. Twiggs, and held in this office as captured and abandoned property, were delivered, on May 24, 1889, to General A. C. Myers, executor of the Twiggs estate. The bonds of the State of Louisiana held for the Secretary of the Treasury are now the only remaining property classed under this head.

MISCELLANEOUS TRUSTS.

With the exception of the transfers noted in the preceding paragraph, there have been no changes in the condition of these trusts. United States bonds are held, under various provisions of law, for the following corporations in the sums set forth:

American Printing House for the Blind, 3 per cents.....	\$250,000
Pennsylvania Company, 4½ per cents.....	200,000
Manhattan Savings Institution, 4 per cents.....	75,000
Alaska Commercial Company, 4 per cents.....	55,000
Total.....	580,000

The securities held for the Secretary of the Treasury, and belonging to the United States, are as follows:

Arkansas State Bonds.....	\$625,000
Louisiana State bonds.....	545,480
North Carolina State bonds.....	50,000
Tennessee State bonds.....	21,000
Virginia State bonds.....	41,800
Nashville and Chattanooga Railroad bonds.....	500,000
Chesapeake and Ohio Canal bonds.....	12,000
South Carolina State stocks.....	3,000
Total.....	1,798,280

REDEMPTION OF NATIONAL-BANK NOTES.

The fiscal year witnessed a decrease of \$41,000,000 in the national-bank circulation—the largest that has taken place within any like period since this currency was first issued. The contraction now going on, which began in 1883 with the redemption of the 3 per cent. bonds, has amounted in round numbers to \$150,000,000, \$50,000,000 in the first half of the interval, and \$100,000,000 in the last half. The volume of the circulation outstanding on June 30 was a little over \$211,000,000, with \$78,000,000 of lawful money on deposit in the Treasury for further reductions.

In proportion to the circulation the redemptions during the year were unusually heavy. This is particularly true of the first seven months, through which the movements that began about December, 1887, occasioned by the scarcity of one and two dollar notes, were continued. Notes of the net value of \$88,217,860.57 were presented, about 10 per cent. less than the previous year, while the average circulation was 13 per cent. less. Since February there has been a distinct falling off in the amounts received, which is sufficiently explained by the diminution of the volume outstanding and the absence of any active cause that would stimulate the movement of the notes to Washington.

There has been no significant variation from the ordinary course into which the redemption of bank-notes has fallen. The only unusual incidents of the year were connected with the funds for the reduction and retirement of circulation. These funds, which in July, 1887, amounted to upwards of \$100,000,000, and excited a good deal of concern, had accumulated mainly from the operation of two different causes; first, the redemption of the 3 and 3½ per cent. bonds, which were largely held as security for circulation, and, secondly, the provisions of the act of July 12, 1882, under which banks extending their corporate existence were required to deposit lawful money for the retirement of the notes issued prior to the date of the extension.

The first of these causes ceased to exist in July, 1887, and the second became practically inactive a year later. Consequently during the last two fiscal years the aggregate of these funds has steadily run down from month to month, and in the ordinary course it will continue to do so until it is reduced to an unimportant figure. The deposits required by the law of 1882 will never again be large, having been only \$1,785,615 last year as compared with \$18,813,797 the year before. The purchase of bonds held as security for circulation produces the same effect as their redemption at maturity, but by the same act of 1882 the deposits for the withdrawal of bonds so held shall not exceed \$3,000,000 in any one month, excepting in the case of bonds called for redemption. The limit of the additions to these funds from the withdrawal of bonds for the reduction of circulation is therefore \$36,000,000 a year. Unless unfavorable financial conditions should arise, or unless, through legislation or otherwise, the national system should become unpopular, there are not likely to be any large deposits in consequence of failures and liquidations. The only event in immediate prospect that threatens to swell these funds is the maturity of the 4½ per cents, and the probability now is that this can not draw more than \$20,000,000 or \$25,000,000 into the Treasury for the retirement of bank-notes.

The net deposits on this account during the fiscal year were \$32,484,415, of which \$1,115,220 were for banks in liquidation or in the hands of receivers, \$29,583,580 for active banks reducing their circulation, and \$1,785,615 for the retirement of notes issued prior to the extension of charters. The total reduction provided for by these deposits is made up of the first two classes, and amounts to \$30,698,800. The limit of \$3,000,000 per month was reached by the tenders in September, 1888, for the first time after it was fixed, and again every successive month until May, when there was a sudden falling off in the amounts offered. The bonds released by these deposits were withdrawn for sale, and the whole movement appeared to be prompted by the desire to realize the high premiums that were paid.

The table below gives by classes and in the aggregate the deposits and redemptions on these accounts for each month of the year, with the balances of the deposits remaining on hand. The tables in the appendix show, by years, the whole of the operations of the Treasury in the redemption of national-bank notes.

Month.	Deposits.				Redemptions.	Balances.
	For retire- ment.	For reduc- tion.	For retire- ment and re-issue.	Total.		
1888—July	\$107,010	\$979,100	\$810,194.00	\$1,896,304.00	\$3,819,281.00	\$90,029,866.65
August	38,200	991,955	184,341.00	1,214,496.00	3,424,798.00	87,819,361.65
September	45,000	2,848,565	66,330.00	2,959,895.00	3,471,728.00	87,307,731.65
October	147,895	3,045,125	170,820.00	3,363,840.00	3,652,712.45	87,018,859.20
November	44,350	2,999,970	79,400.00	3,123,720.00	3,712,558.70	86,430,020.50
December	168,995	3,088,230	133,270.00	3,390,465.00	3,541,014.00	86,279,471.50
1889—January	72,880	2,991,850	128,740.00	3,193,470.00	5,492,956.00	83,979,985.50
February	124,070	2,927,205	73,070.00	3,124,345.00	4,597,080.25	82,577,250.25
March	105,640	2,943,805	47,500.00	3,096,945.00	3,188,750.50	82,485,444.75
April	139,750	2,943,780	15,000.00	3,103,530.00	3,075,596.50	82,513,378.25
May	65,180	1,962,435	38,684.84	2,066,299.84	4,082,254.50	80,497,423.59
June	56,250	1,856,590	38,265.16	1,951,105.16	4,397,392.00	78,051,136.75
Total	1,115,220	29,583,580	1,785,615.00	32,484,415.00	46,386,121.90	-----

With the exception of some temporary annoyances occasioned in parts of the country by the change in the contract for transportation, the redemption system has worked smoothly, and apparently to the satisfaction of the public as well as of the banks. The regulations now in force, which have been suggested by the experience of the past, are well understood and generally complied with. Many of the restrictions formerly enforced with regard to return remittances from the Treasury have been removed, so that the holder of bank-notes has now the greatest liberty of choice, consistent with the interests of the Treasury and the banks, as to how he shall be paid. The latest modification has been in the rates for express charges, by which the discrimination formerly made against these notes has been removed, and they have been placed upon an equality in this regard with the other paper currency of the country.

The expenses of the redemption agency for the year were \$131,190.67. This sum will be reimbursed to the Treasury and assessed against the banks as provided by law, at the rate of $\$1.45\frac{4}{10}\%$ per \$1,000 of notes redeemed. The additions to the fund arising under section 8 of the act of July 12, 1882, amounted to \$3,131.09, and the charges against it to \$4,552.59, leaving a balance of \$14,506.11.

There are in circulation unsigned or partly signed notes of banks amounting to \$14,600, less some small sums known to have been retired, which were stolen from the custody of the banks after having been received from the Department, and which have been refused at this office under a ruling that they were not obligatory promises of the banks to pay. The question of the proper status of these notes having been raised by the demand of a holder for the redemption of certain of them out of money on deposit in the Treasury under the provisions of section 6 of the act of July 12, 1882, and the Treasurer having been called upon for his views on the subject, which were submitted after mature deliberation, this opportunity is taken to make public some of the main grounds on which he was forced to the conclusion that such notes ought to be redeemed.

By the provisions of law referred to, the notes issued to banks extending the period of their corporate existence are required to be redeemed at the Treasury. At the end of a specified period the banks must deposit lawful money sufficient to redeem the remainder of the circulation which was outstanding at the date of their extension, and the gain that may arise from the failure to present the notes for redemption inures to the benefit of the United States. These provisions, considered particularly in connection with the clauses of the statutes relating to the issue of circulating notes to the banks, and generally as part of the whole body of law on the subject of the national currency, seem to be consistent with the powers of Congress only upon the assumption that such notes, from the time they come into the possession of the bank in the manner prescribed by law, and before they receive the signatures of the bank's officers, are obligations of the Government delivered to the bank for the bank's benefit, on security pledged for their return to the Treasury, and as such are redeemable by the Government, at the hands of an innocent holder, and if the necessary funds are not furnished by the bank, then the security pledged becomes forfeit.

The inference is necessary, if notes stolen from a bank are held to be irredeemable, that Congress intended the gain arising from their rejection to go to the Treasury. Now, there can be no pretense that notes so stolen derive any validity from a fraudulent act. They doubtless have the same character yet that belonged to them while they were in the

custody of the bank. If they have no value to the holder who received them as money, they had none to the bank which voluntarily pledged security for their return to the Treasury. But if they are mere blank paper, can Congress, in the face of the constitutional prohibition that no person shall be deprived of property without due process of law, enact a statute requiring the bank to deposit money for them, and appropriating that money to the use of the United States? Can the Department be justified in assuming that Congress meant a statute to have this effect, unless the language used will bear no other meaning? The wording of the section is careful and clear. The notes issued to the banks must be redeemed, and the gain from failure to present them shall inure to the United States. The inference that a gain is to arise from the theft of unsigned notes, and that this gain also is to be appropriated, is purely gratuitous.

But if, on the other hand, these unsigned notes, as they were delivered to the bank and stolen by the thief, were to all intents money issued by the Government, then the language of the law of 1882 can be taken at its plain import. Congress is not placed in the attitude of trying to violate the Constitution, but is seen to have acted in the exercise of an undoubted prerogative. The bank is deprived of no right, having the ordinary remedies of the laws relating to property and the punishment of crime. There is no question of imposing on a corporation an unsigned paper as a promissory note; the question is whether, to save that corporation harmless against loss of money by theft, the pieces of money so lost shall be deprived of all value, to the injury of the persons into whose hands they may afterwards come.

These notes are a cause of grievance to the public, circulating as they do without question on the faith of their being genuine impressions of the plates regularly issued from the Treasury, and being discredited only when presented for redemption. The feeling is prevalent that they ought to be paid, and unless provision is made for taking them up they will inevitably become the basis of a claim against the Government. It is hoped that such steps will be taken by the Department as may be necessary to settle definitely the question of liability for them.

WORK OF THE OFFICE.

There were turned over to the present Treasurer, on his assuming the duties of the office, May 11, 1889, \$237,298,492.39 in cash assets, together with \$320,699,000 of unissued notes and certificates and \$213,524,927.63 in bonds and coupons, making an aggregate of \$771,432,320.45. He was enabled to give to his predecessor a receipt in full for all moneys and securities called for by the accounts. The labor of examining such an amount of coin and paper was heavy, and the greater part had to be done in close vaults, but it was prosecuted with unusual expedition. A saving of time, expense, and discomfort was effected by the use of electrical fans for regulating temperature and ventilation.

The Treasurer feels it his duty to call attention to several matters which he deems of sufficient importance to command the early attention of Congress. The vaults, excepting the large one for silver, are such as have been in use for many years, and consequently they can not be regarded as equally secure with those of more modern design. It is recommended that they be strengthened and supplied with the recent improvements. The old safes should be replaced with new ones. The cash room when it was fitted up some years ago was doubtless supplied

with all the conveniences and appliances for the safe transaction of business then known, but improvements have since been introduced by the public generally which would add greatly to the present facilities and render more secure the property of the Government. In fact the banking-house of the Government should be made fully equal to the modern banking-house of the first-class cities. The Treasurer is required to give a large bond, and is held responsible for the safe-keeping of all things of value placed in his hands; hence he feels that he should be supplied with all the safeguards that modern invention has produced.

It sometimes becomes necessary to the proper conduct of business, or advantageous to the interests of the Department or of the public, for the Treasurer to make personal visits to a sub-treasury or to a distant city. The emergency is frequently so clear that there is no room for doubt or misunderstanding of duty. As there is no appropriation for such purposes, the Treasurers have personally borne the expenses of these journeys. It is respectfully recommended that some provision be made to relieve them of this tax upon their private purses. There should also be a fund available for the recovery of moneys lost or stolen from the Treasury and for making such immediate investigations as may be necessary to fix the responsibility or detect the criminal. Such expenses, likewise, when they have been necessary in the past, have been defrayed by the Treasurers themselves.

With the increase of its importance, the office is becoming more and more an object of interest to the public. Several hundred thousand visitors annually now apply for permission to see the vaults or to acquaint themselves with the methods of conducting public business. They are not all prompted by idle curiosity, but many of them evince a commendable desire for information on subjects into which they doubtless have the right to inquire. This constant stream of strangers, even though it be confined to the corridors and public rooms of the building, is a menace and at times a perplexity to the officers and employes responsible for the safe-keeping of the public funds. During business hours, however, the regular force of clerks and watchmen has proved an adequate guard, and the Treasurer has the satisfaction of relying upon the honesty and discretion of persons whom he can control and in whom he has confidence. But at night, when the building is left in the hands of a limited number of watchmen, the Treasurer is deprived of his custodianship, although he is not relieved of his responsibility. It is recommended that the force of the office be so increased as to allow him to employ six watchmen, who should be provided with proper arms, to act under the direction of the captain of the watch, but subject to the orders of the Treasurer, as a patrol and guard for the office.

The Treasurer's relations with the other bureaus of the Department require him habitually to intrust important papers and other articles of value to messengers, who may not be known to him, and whose official character he has to accept on trust. It would be wise to require all persons employed in such a capacity to be provided with an official uniform or other distinctive badge.

The subordinate officers and employes of the bureau are commended for the faithfulness and ability with which they have discharged their duties.

I have the honor to be, very respectfully, your obedient servant,
JAMES N. HUSTON,
Treasurer of the United States.

Hon. WILLIAM WINDOM,
Secretary of the Treasury.

REPORT OF THE DIRECTOR OF THE MINT.

TREASURY DEPARTMENT,
OFFICE OF DIRECTOR OF THE MINT,
Washington, D. C., November 1, 1889.

SIR: Although I did not enter upon duty as Director of the Mint until the 16th ultimo, my long service in the Bureau, extending from its organization in 1873, and the fact that for a number of years I have had special charge of the preparation of the reports of the Bureau, enable me, at this early date, to lay before you a report of the operations of the mints and assay offices for the fiscal year ended June 30, 1889, as required by section 345 of the Revised Statutes.

This report is the seventeenth annual report of the Director of the Mint.

DEPOSITS AND PURCHASES OF GOLD AND SILVER.

The total value of all the gold and silver received at the mints and assay offices of the United States, during the fiscal year 1889, was \$90,357,903.01, of which \$83,374,587.05 consisted of original deposits, and \$6,983,315.96 of re-deposits.

The gold deposited, including the gold parted from silver deposits, amounted to 2,628,413.276 standard ounces, of the value of \$48,900,712.04.

Of the above, 363,579.851 standard ounces, of the value of \$6,764,276.28, consisted of re-deposits, that is, bars of gold which had previously been deposited at the mints or assay offices. Of the re-deposits, \$3,276,501.61 were fine bars manufactured at the United States assay office at New York, and the remainder consisted mainly of deposits, at the minor assay offices, melted into unparted bars, and shipped to the mint at Philadelphia, for refining and coinage.

The amount of gold deposited at the mints and assay offices, during the year, exclusive of re-deposits, was 2,264,833.425 standard ounces, of the coining value of \$42,136,435.76.

Of the gold deposited, during the year, \$31,440,778.93 consisted of the product of mines of the United States, against \$32,406,306.59 deposited, during the prior fiscal year, indicating a decline in the gold production of the country of about \$1,000,000.

Of the gold of domestic production deposited, \$17,347,572.02 represent refined bars manufactured by private refineries in the United States, and \$14,093,206.91 unrefined gold.

The distribution of the unrefined gold deposited, among the States and Territories producing the same, will be found in a table in the Appendix to this report.

Foreign gold bullion of the value of \$2,136,516.66 and foreign gold coin of the value of \$4,447,475.99, were deposited, a total of foreign gold of \$6,583,992.65, against \$36,337,927.47 in the preceding year, showing a falling off of nearly \$30,000,000 in the foreign gold which found its way to the mints and assay offices of this country.

Light-weight domestic coin was melted of the value of \$585,066.87, and old material, consisting of jewelry, plate, etc., of the value of \$3,526,597.31.

The deposits and purchases of silver, including silver contained in gold deposits, aggregated 35,627,273.69 standard ounces, of the value of \$41,457,190.97 at the coining rate (\$1.16 $\frac{1}{4}$ per standard ounce).

Of the silver received at the mints, 188,237.24 standard ounces, of the coining value of \$219,039.68, consisted of re-deposits, principally deposits at the minor assay offices of the United States; so that the original de-

posits of silver—that is, all the silver received exclusive of re-deposits—amounted to 35,439,036.45 standard ounces, of the coining value of \$41,238,151.29.

Of the silver received during the year, 32,895,985.50 standard ounces, of the coining value of \$38,278,964.79, were classified as domestic production.

Of this, 31,261,353.84 standard ounces, of the coining value of \$36,376,848.05, consisted of fine silver bars manufactured at private refineries in the United States. As these refineries handle the foreign silver which comes to this country in miscellaneous ores, which foreign product becomes so intermingled with the product of the mines of the United States that it is impossible to separate it, the classification, at the mints, of silver as of domestic production is not accurate. Of the domestic product deposited at the mints, 1,631,631.66 standard ounces, of the coining value of \$1,902,116.74, were unrefined silver. The distribution of the unrefined silver deposited at the mints, among the producing States and Territories, is exhibited in a table in the Appendix.

Foreign silver bullion, distinctively known as such, was deposited at the mints to the amount of 1,182,110.97 standard ounces, of the coining value of \$1,375,547.30.

Foreign silver coins, containing 364,750.71 standard ounces, of the coining value of \$424,437.18, were also deposited and melted.

Silver coins of the United States, consisting principally of worn and uncurrent subsidiary coins received by the Treasury and transferred to the mint at Philadelphia for recoinage, were melted during the year, and contained 431,449.01 standard ounces, of the coining value of \$502,049.75.

In addition, trade-dollars, containing 6,714.25 standard ounces, of the coining value of \$7,812.94, were deposited as bullion and melted during the year.

Old silver, in the shape of plate, etc., containing 558,026.01 standard ounces, of the coining value of \$649,339.33, was received and melted.

* * * * *

COINAGE.

The coinage executed at the three coinage mints in operation during the year, viz, at Philadelphia, San Francisco, and New Orleans, consisted of 93,427,140 pieces, of the nominal value of \$60,965,929.61.

The bulk of the gold coinage was, as usual, executed at the mint at San Francisco.

The gold coinage consisted of 1,639,285 pieces, of the value of \$25,543,910, of which \$19,108,880 were double eagles; \$6,248,800 eagles; \$95,825 half-eagles; \$165 three-dollar pieces; \$84,165 quarter eagles; and \$6,075 gold dollars.

The silver coinage comprised 33,792,860 standard silver dollars, of which \$21,385,860 were struck at the mint at Philadelphia; \$12,300,000 at the mint at New Orleans, and \$108,000 at the mint at San Francisco.

The subsidiary silver coinage consisted of 6,477,134 pieces, of the nominal value of \$721,686.40, of which \$6,430 were in half-dollars; \$114,715 in quarter-dollars; and \$600,541.40 in dimes.

The minor coinage, executed by the mint at Philadelphia, consisted of 51,516,861 pieces, of the nominal value of \$906,473.21, of which \$489,020.50 were five-cent nickel pieces; \$132.30 three-cent nickel pieces; and \$417,320.41 one-cent bronze pieces.

* * * * *

The coinage of silver dollars exceeded that of the preceding fiscal year by 1,075,187 pieces.

The coinage of subsidiary silver was \$695,735.85 less than in the preceding year.

The minor coinage was \$312,503.36 less than in the preceding fiscal year.

In the Appendix will be found the usual tables, showing by mints and by denomination of pieces, the coinage of the fiscal year and of the calendar year 1888.

A table will also be found in the Appendix, exhibiting the coinage of the mints, each calendar year, since the organization of the mint in 1792, to the close of the fiscal year 1889.

GOLD AND SILVER BARS MANUFACTURED.

In addition to the coinage executed, gold and silver bars were manufactured by the mints and assay offices of the value of \$28,950,367.55.

* * * * *

The bulk of the bars manufactured was, as heretofore, at the assay office of the United States at New York.

The usual table showing the character of the bars made at each institution will be found in the Appendix.

MEDALS AND DIES MANUFACTURED.

Section 3510, Revised Statutes, provides that the engraver of the mint at Philadelphia shall prepare from the original dies all working dies for use in the coinage of the several mints.

Section 3551 provides that dies of a national character may be executed by the engraver, and national and other medals struck at the mint at Philadelphia.

Under the above provisions of law, 1,020 dies were made in the engraving department of the mint at Philadelphia, during the fiscal year, of which 1,018 were coinage dies.

* * * * *

The number of medals manufactured was as follows:

Gold	75
Silver	546
Bronze	188
Total	809

* * * * *

GOLD BARS EXCHANGED FOR GOLD COIN.

Under the provisions of the act of May 26, 1882, gold bars were exchanged for gold coin, during the fiscal year, free of charge, of the value of \$602,293.01, at the mint at Philadelphia, and \$56,905,519.41, at the assay office at New York, a total of \$57,507,812.42, against \$15,816,986.25 in the preceding year, indicating a largely increased demand of gold bars for export.

WORK OF THE REFINERIES.

The refineries of the mints and of the assay office at New York, during the fiscal year, operated on 5,127,648 ounces of the precious metals, containing gold and silver of the coining value of \$25,162,704.12.

* * * * *

PURCHASE OF SILVER FOR THE COINAGE OF THE SILVER DOLLAR.

During the fiscal year ended June 30, 1889, the purchase of silver for the silver dollar coinage, as well as the coinage of the same, was confined to the mints at Philadelphia and New Orleans, with the exception, that the superintendents of the mints at San Francisco and Carson, were allowed to purchase the silver contained in gold deposits, and the silver obtained in bar fractions.

There were delivered during the year on purchases made for the silver-dollar coinage, through the Bureau of the Mint, by the Secretary of the Treasury, 28,557,109.79 ounces of standard silver, costing \$25,498,762.47, an average cost of \$0.840376 per ounce standard, or \$0.93375 per ounce fine.

Purchases were also made by the superintendents of the mints at Philadelphia and New Orleans, in lots of less than 10,000 ounces, at prices fixed from time to time by the Director of the Mint. The amount delivered on purchases of this character, was 748,017.72 ounces of standard silver, costing \$630,013.31.

In addition, silver contained in gold deposits, and remnants of silver deposits for bars, were purchased, to the amount of 104,715.06 standard ounces, at a cost of \$89,077.33.

The aggregate amount of silver delivered on purchases of all kinds, for the coinage of the silver dollar, during the year, was 29,409,845.59 ounces, costing \$24,717,853.81, an average cost per ounce standard of \$0.840462, or \$0.933847 per fine ounce.

* * * * *

The amount of silver bullion on hand, available for the coinage of the silver dollar, on July 1, 1888, was 4,083,470.24 standard ounces, the cost of which was \$3,437,904.91, while the amount delivered on purchases during the year (as shown in the table given above), was 29,409,845.59 ounces, costing \$24,717,853.81, making the total amount of silver available for the dollar coinage, during the fiscal year, 33,493,315.83 standard ounces, costing \$28,155,758.72.

* * * * *

There were manufactured during the year 33,793,860 silver dollars, containing 29,041,598.42 ounces of standard silver, costing \$24,123,797.80.

The wastage of silver by the operative officers in this coinage was 13,359.46 standard ounces, costing \$11,168.84, while silver was lost in sweeps amounting to 24,934.13 standard ounces, costing \$21,111.42, making the gross consumption of silver incident to the dollar coinage, 29,079,892.01 standard ounces, costing \$24,456,008.06.

The seigniorage on the silver dollars coined during the year was \$9,370,062.20.

* * * * *

CIRCULATION OF SILVER DOLLARS.

The total number of silver dollars coined, the number held by the Treasury for the redemption of certificates, the number held in excess of outstanding certificates, and the number in circulation, on November

1 of each of the last four years, are shown in the accompanying comparative statement:

COINAGE, OWNERSHIP AND CIRCULATION OF SILVER DOLLARS.

Date.	Total coinage.	In the Treasury.		In circulation.
		Held for payment of certificates outstanding.	Held in excess of certificates outstanding.	
November 1, 1886	\$244, 433, 386	\$100, 306, 800	\$82, 624, 431	\$61, 502, 155
November 1, 1887	277, 110, 157	160, 713, 957	53, 461, 575	62, 934, 625
November 1, 1888	309, 750, 890	229, 783, 152	20, 196, 288	59, 771, 450
November 1, 1889	343, 638, 001	277, 319, 944	6, 219, 577	60, 098, 480

SUBSIDIARY SILVER COINAGE.

The stock of silver bullion available for the subsidiary silver coinage, at the mints at Philadelphia and San Francisco, July 1, 1888, was 2,680,016.60 standard ounces, costing \$3,081,980.63.

That at San Francisco was obtained from the melting of trade-dollars redeemed under the act of March 3, 1887.

The amount at Philadelphia consisted in part of bullion purchased for the subsidiary coinage, in part of worn and uncurrent silver coins transferred from the Treasury, and in part of melted trade-dollars.

During the fiscal year, worn and uncurrent silver coins of the following denominations and nominal value, were transferred to the mint at Philadelphia, for recoinage into subsidiary silver coins, viz :

Silver dollars of 1873 and prior years	\$4, 585. 00
Standard silver dollars (presumably coined since 1878)	31, 042. 00
Half-dollars	235, 682. 00
Quarter-dollars	222, 920. 00
Twenty-cent pieces	1, 332. 60
Dimes	34, 755. 00
Five-cent silver pieces	11, 731. 30
Three-cent silver pieces	889. 42
Total	542, 937. 32

When melted, these coins produced 420,403.60 ounces of standard silver bullion, of the value of \$523,052.70.

The loss, \$19,884.62, on the recoinage, was reimbursed from the appropriation for recoinage of worn and uncurrent gold and silver coin in the Treasury.

The silver resulting from the melting of subsidiary coins sent to the Bureau of the Mint for special test, and to the mint at Philadelphia for the annual assay, amounting to 180.03 standard ounces, of the value, in subsidiary coin, of \$223.99, was purchased for the subsidiary coinage.

* * * * *

TRADE-DOLLAR RECOINAGE.

The balance of silver bullion derived from trade-dollars melted, at the mints at San Francisco and Philadelphia, available for the subsidiary coinage, at the commencement of the fiscal year, was as follows:

Mint.	Standard ounces.	Cost.
San Francisco	214, 984. 25	\$247, 065. 57
Philadelphia	2, 438, 848. 40	2, 802, 955. 80
Total	2, 653, 832. 65	3, 050, 021. 37

The balance at San Francisco was coined into quarter-dollars and dimes, with the exception of 16.97 ounces, costing \$19.51, which were transferred to the silver dollar bullion account.

* * * * *

COURSE OF SILVER.

The price of silver in London at the commencement of the fiscal year, was $42\frac{1}{8}$ pence per ounce, British standard (.925 fine).

During the month of July, 1888, the price ranged, with slight variations, from 42 to $42\frac{5}{16}$ pence.

The limited demand for silver and the low rate of Indian exchange, caused the price to decline, early in August, to $41\frac{5}{16}$ pence.

In September a demand for silver for coinage purposes, and an improvement in the rate of Indian exchange, caused the price to rise rapidly from $42\frac{1}{16}$, the opening rate in September, to $44\frac{1}{16}$ pence on September 22, which was the highest point reached during the fiscal year, indeed since January, 1884. Three days later, the price declined to 43 pence, closing in September at $43\frac{1}{4}$ pence.

During the month of October, the price ranged from $42\frac{7}{8}$ to $43\frac{1}{4}$ pence.

From the 1st to the 27th of November, the price was almost constant, ranging only from 43 to $43\frac{1}{8}$ pence, declining, however, towards the close of the month to $42\frac{7}{8}$ pence.

In December, the fluctuations were very slight, and the price of silver at the close of the calendar year was $42\frac{9}{16}$ pence.

From January 1 to June 30, 1889 the variations in price were slight, ranging between 42 and $42\frac{3}{4}$ pence, closing for the fiscal year at 42 pence.

The shipments of silver to India during the calendar year 1888 amounted to about \$26,000,000, being about the average of the last ten years, while the council bills sold during the same year realized £13,915,000, or about \$69,000,000.

The average price of silver in London during the fiscal year 1889 was 42.5 pence, equivalent at the average rate for sight sterling exchange, to \$0.935, and at the par of exchange, to \$0.9316 per fine ounce.

At this price, the bullion value of the standard silver dollar was \$0.72.

* * * * *

MINOR COINAGE.

Notwithstanding the fact that the minor coinage executed, during the fiscal year 1888, was the largest in the history of the mint, the demand for minor coins, notably five and one cent pieces, continued during the last fiscal year, taxing to its utmost the mint at Philadelphia and requiring the coinage of 51,516,861 pieces.

Experience has demonstrated that from about February 1 to the commencement of the fall trade, minor coins are presented to the Treasury in considerable quantities, for redemption in lawful money, as provided

by section 3520, Revised Statutes, and that between these dates, they accumulate in the Treasury and the subtreasuries throughout the country. The superintendent of the mint at Philadelphia has been instructed, when this is found to be the case, to return all requests for minor coins coming from any city in which a sub-treasury is located.

* * * * *

APPROPRIATIONS AND EXPENDITURES.

The amount appropriated for the support of the mints and assay offices for the fiscal year ended June 30, 1889, was \$1,095,656, of which there was expended \$994,989.71, leaving in the Treasury \$100,666.29.

In addition to the amount expended from current appropriations, the sum of \$116.60 was expended from an unexpended balance of the appropriation for the renewal of the steam-power plant of the mint at Philadelphia.

There were also expended, at the coinage mints, from the general appropriation contained in the act of February 28, 1878, authorizing the coinage of the standard silver dollar, \$223,225.05.

The total amount expended at the mints and assay offices, during the year, was \$1,218,331.36.

There was paid at the Treasury Department, from the appropriation for the coinage of the standard silver dollar, the sum of \$930, for daily cablegrams from London giving the price of silver, making the total expenditures for the services of the mints and assay offices during the year \$1,219,261.36.

* * * * *

The expenses of the office of the Director of the Mint, including salaries of officers and clerks, examination of mints and assay offices, maintenance of laboratory, purchases of books and incidental expenses, and the collection of the statistics of the production of the precious metals, amounted to \$32,723.36, out of \$36,140 appropriated for these purposes.

* * * * *

The estimates of appropriations for the Mint service for the fiscal year ended June 30, 1891 (including "freight on bullion and coin"), which I had the honor to submit on the 7th ultimo, aggregated \$1,139,260, against \$1,141,140 appropriated for the same purposes for the current fiscal year, a reduction of \$1,880.

* * * * *

EARNINGS AND EXPENDITURES OF THE MINTS AND ASSAY OFFICES.

The total earnings of the mints and assay offices, from all sources, during the year, amounted to \$10,351,791.47. Of these, \$9,370,662.20 consisted of seigniorage on the coinage of silver dollars; \$32,987.65 seigniorage on the coinage of subsidiary silver, and \$751,953.32 seigniorage on the manufacture of minor coins. The remainder of the earnings arose from charges collected from depositors, from surplus bullion recovered, and miscellaneous gains.

The total expenditures and losses of all kinds, including all the expenses for the support of the mints and assay offices and the acid refineries, the wastage of the operative departments, and the distribution of silver and minor coins, amounted to \$1,502,665.60, leaving a net profit of earnings over expenses during the year of \$8,849,035.87.

In the Appendix will be found a table, exhibiting in detail, the earnings and expenditures at each of the institutions of the Mint service.

* * * * *

IMPORTS AND EXPORTS OF THE PRECIOUS METALS.

Gold.—The value of the gold bullion imported into the United States during the fiscal year was \$1,705,450.

Of this amount, \$559,412 was imported from British Columbia, \$363,235 from the British possessions in Australasia, \$445,123 from Mexico, \$250,754 from Colombia, the remainder coming in small lots from various countries, principally South America.

In addition to gold bullion, gold ores, of the invoiced value of \$87,287, principally from Mexico and China, reached this country for refining.

Foreign gold coins were imported of the value of \$7,175,789.

Of the foreign gold coin imported, \$1,472,560 came from France and its colonies, \$1,062,456 from Germany, \$371,953 from England, \$2,768,334 from Australia, \$57,045 from the British West Indies, \$579,982 from Mexico, \$759,111 from Cuba, and the remainder from various other countries, principally South America.

There were re-imported of our own gold coin, during the year, \$1,403,619.

* * * * *

There was exported, during the fiscal year, gold bullion of the value of \$50,786,393, of which \$49,679,850 consisted of refined bars bearing the stamp of a United States mint or assay office, and \$1,106,543 was classified as "other bullion."

Of the gold bullion exported, \$23,022,082 went to France, \$19,049,409 to England, \$8,703,698 to Germany, and \$11,204 to Hong-Kong.

Foreign gold bars were re-exported to England of the value of \$31,933.

In addition to the export of gold bullion, United States gold coin was exported of the value of \$4,113,939, more than half of it, \$2,464,576, going to Venezuela.

There were re-exported of foreign gold coin \$4,990,020, of which \$3,812,155 went to Cuba, \$887,544 to England, \$167,320 to Venezuela, and the remainder in small lots to other countries.

Domestic gold ores were exported of the invoiced value of \$80,961.

In addition to these ores, minute quantities of gold were exported, contained in copper matte and other furnace products, the value of which is not known.

* * * * *

There was a net loss of gold to the United States during the year, by exports of bullion and coin over imports of the same, of \$49,661,101.

Silver.—The commercial value of the foreign silver bullion imported into the United States during the year, as registered at the custom-houses, was \$5,713,049, of which \$1,684,187 came from Mexico, \$993,698 from Colombia, and the remainder in small lots from the British possessions in the Northwest Territory, from Honduras and San Domingo.

In addition, silver ores of the invoiced value of \$6,951,719 were imported. Most of these ores came from Mexico, and contained, besides silver, large quantities of lead and some copper, the value of all the metals being included in the above value.

Deducting the value of the lead and copper contents, approximately \$947,554, at custom-house valuation, the value of the silver was \$6,004,165.

* * * * *

The silver-lead ores imported into the United States contained silver of the commercial value of \$4,871,116, and 58,579,609 pounds of metallic lead, of the custom-house valuation of \$951,229.

The imports of foreign silver coin into the United States during the year amounted to \$12,687,823, of which \$11,773,709 consisted of Mexican dollars.

United States silver coins, principally subsidiary silver, but including 15 trade dollars, of the value of \$277,343, were imported during the year.

* * * * *

There was exported from the United States, during the year, domestic silver bullion of the commercial value of \$25,217,903, of which \$15,057,519 went to London, \$5,468,600 to Hong-Kong, \$2,390,500 to Japan, \$1,942,534 to India, \$339,750 to France, and \$19,000 to Guatemala.

Foreign silver bullion was re-exported of the value of \$30,614.

Foreign silver coin was re-exported of the value of \$11,373,972, of which \$8,143,248 went to Hong-Kong, \$1,643,167 to England, and the remainder to other countries.

Our own silver coins to the value of \$66,759 were exported.

Small lots of foreign silver ores were re-exported, of the invoiced value of \$27,535.

* * * * *

There was a net loss of silver during the year, to the United States, of \$12,034,403.

The total loss by net export of gold and silver, during the fiscal year 1889, was as follows:

LOSS OF GOLD AND SILVER TO THE UNITED STATES, 1889.

Gold.....	\$49,661,101
Silver.....	12,034,403
Total.....	61,695,504

* * * * *

MOVEMENT OF GOLD FROM THE UNITED STATES.

The heavy movement of gold from the United States which commenced in May, 1888, and which has continued, with some interruptions, up to the present time, has created a profound stir in the American commercial world and excited some apprehension of a serious drain upon the gold stock of the United States, as this is the first loss of gold of any magnitude, since the resumption of specie payments in this country.

The exports of gold from the United States, as well as the net loss of gold, were materially larger last year than any year since 1875. The gain of gold by the United States by net imports, from July 1, 1875, to June 30, 1888, amounted to \$147,380,181.

* * * * *

The bulk of the gold exported since May, 1888, when shipments commenced, consisted of United States gold bars shipped from the port of New York. The value of the fine gold bars exported from May 1, 1888—about the commencement of the movement—to September 30, 1889, was \$61,435,989.

* * * * *

It is probable that the exportation of gold was somewhat facilitated by the readiness with which gold bars can be obtained for gold coin, free of charge, at the assay office at New York, the cost of shipping bars being less expensive than coin, principally from the fact that the

loss of weight by abrasion is considerably less on bars than on coin *in transitu*.

* * * * *

The balance of trade for the period embraced between May, 1888, and September, 1889, was against the United States, the excess of the imports of merchandise into the United States over exports of the same, amounting to \$47,825,359. The movement of merchandise was as follows:

Imports of merchandise into the United States.....	\$1,058,997,805
Exports of merchandise from the United States.....	1,011,172,446
Excess of imports over exports.....	47,825,359

But there have been other influences bearing upon this movement of gold than an unfavorable balance of trade.

From an examination of the table first presented it will be seen that the bulk of the shipments took place at dates when exchange was between \$4.88½ and \$4.89.

The cost of transporting gold bars from New York to Europe is about one-eighth of 1 per cent., and the cost of insurance from nine one-hundredths to three-sixteenths of 1 per cent., so that it would not be profitable to ship bullion, rather than to buy exchange, if the price of exchange was below \$4.88.

As regards shipments to London, the well-known fact that the Bank of England pays for gold only 77s. 9d. per ounce, British standard (.916½ fine), while it sells gold at the rate of 77s. 10½d., equivalent to a coining charge of 1½ pence per ounce, would not induce shipments of gold to London.

The margin of 1½ pence per ounce, at the Bank of England, between the purchase and selling prices of gold, rather encourages the shipment of gold from London, as owners of bullion in London will accept any price for shipment above 77s. 9d. per ounce. So that the price of exchange in New York would have to be nearly \$4.89, before it would be profitable to ship gold to London, for sale to the Bank of England, in preference to buying exchange.

As a matter of fact, most of the gold which recently left this country went to France.

In addition to the amount directly consigned to France (\$27,692,855), it is well known that the Bank of France received, during this period, large sums of gold from the United States consigned to London.

Exchange between London and Paris had been in favor of the latter, and as London was a creditor of New York, the specie for debts payable in London was, by agreement, sent to France.

* * * * *

The gold reserves of the Bank of France increased, in less than nine months, £13,108,000 or \$63,790,000.

The present stock of gold in the Bank of France is the largest it ever held. At the commencement of the year 1880, it had fallen to about £22,000,000, against £53,313,000 on September 19, 1889, an increase of over £31,000,000.

* * * * *

It is well known that the Bank of France has, for nearly a year past, been increasing its gold reserve, and it is also a matter of general acceptance, that both the Bank of France and the Bank of Germany credit banking-houses in Paris and Berlin, with the value of bullion shipped to them from New York, *at the date of shipment*, thus lessening the cost of the movement by the interest on the amount during the whole period

of transit, and encouraging the importation of gold, whenever those institutions desire to strengthen their gold reserves.

Moreover, as the rate of interest in England has been higher than usual, that fact has had a tendency to check investment of British capital in the United States as well as in other countries (and in saying this we are not unmindful of the enormous amounts of such capital employed by English syndicates or trusts in the purchase of American breweries, for instance); and thus, owing to the lack of bills of exchange which would have been drawn against the capital invested in the United States, if the rate of interest in England had been lower, gold, has been shipped to England which would otherwise have remained here.

Undoubtedly, a large demand for gold coin has been created in Paris on account of the Exposition. The number of Americans traveling abroad is yearly growing larger, and last year was especially large.

It is estimated that some 120,000 people from the United States visited Paris during the Exposition,* and nearly all of them have carried with them bills of credit which necessitated settlement by New York bankers with their London and Paris correspondents.

As the gold reserve of the Bank of England was such that any considerable movement of specie from that bank might involve serious consequences; the rate of exchange between New York and London was consequently high, and this induced shipments of gold to France both directly and by way of London, in order to pay the balances due on letters of credit issued by New York banks on their French and English correspondents.

The present downward tendency of the rate of exchange indicates a strong probability of the return of a large portion of these bars, especially if the balance of trade should become more favorable to this country, as is indicated by the excess of exports of merchandise over imports, in the month of September, which was nearly \$8,000,000 in favor of the United States.

* * * * *

The ownership, as distinguished from the location, of the precious metals, on the 1st of July, 1889, is exhibited in the following table:

OWNERSHIP OF GOLD AND SILVER IN THE UNITED STATES, JULY 1, 1889.

Ownership.	Gold coin and bullion.	Silver coin and bullion.				Total gold and silver coin and bullion.
		Silver dollars.	Subsidiary silver coin.	Silver bullion.	Total silver.	
United States Treasury.....	\$188,451,708	\$21,889,782	\$25,124,672	\$10,444,443	\$57,458,901	\$243,910,609
National banks (July 12, 1889).....	\$152,169,400	\$19,238,787	4,495,682	.....	23,734,469	175,903,869
Banks other than national (values specifically reported).....	46,911,658	2,118,516	46,981,482	.....	2,118,516	49,030,169
Banks other than national (values not specifically reported) and in private hands.....	294,530,744	290,255,561		.....	337,237,043	631,767,787
Total.....	680,063,505	313,502,650	76,601,836	10,444,443	420,548,929	1,100,612,434

* Gold coin and bullion in the Treasury, exclusive of \$117,130,229 gold certificates outstanding.

† Silver dollars of the Treasury, exclusive of \$257,155,535 silver certificates outstanding.

‡ Includes Treasury and clearing-house gold certificates, \$78,261,790.

§ Includes \$12,452,057 silver certificates held by national banks.

It is proper to state, that, in preparing this table, the amount of gold coin in banks other than national, from which reports have been received, viz: \$46,911,653, is an estimate, based upon returns of certain banks to the Comptroller of the Currency, about the close of the fiscal year.

* * * * *

From the above table it will be seen, that the amount of gold owned by the Treasury of the United States on July 1, 1889, was \$186,451,708, against \$194,218,632 owned at the corresponding period of the prior year, showing a loss of gold to the Treasury during the year of \$7,766,924.

The amount of silver owned by the Treasury on July 1, 1889, was \$57,458,901, against \$80,039,794 at the close of the preceding fiscal year, showing that the Treasury owned \$22,580,893 less silver at the close of the fiscal year 1889 than at the close of the preceding year, the falling off being principally in silver dollars.

* * * * *

The amount of metallic and paper money in circulation in the United States (outside of the Treasury), on July 1, 1889, was \$1,380,418,091, against \$1,372,240,256 at the close of the preceding fiscal year, showing an increase in the amount of money in circulation between those dates of \$8,177,835.

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GOLD AND SILVER USED IN THE INDUSTRIAL ARTS IN THE UNITED STATES.

* * * * *

The value of the precious metals, reported by manufacturers, jewelers, and others as, used during that year, was:

Gold.....	\$11,152,120
Silver	5,198,413
Total.....	<u>16,350,533</u>

* * * * *

The value of United States gold coin melted for use in the manufacture of bars for industrial purposes, during the calendar year 1888, was only \$369,183.97, against a reported melting down of United States gold coin for industrial employment, reported by jewelers and manufacturers for the year 1885, of \$3,500,000.

Unless there has been a decided falling off in the amount of coin melted for industrial purposes by jewelers, the value of the gold used annually in the United States in the industrial arts may be placed at, approximately, \$16,500,000, and of silver, at about \$8,000,000.

Of the gold used for this object, about \$3,500,000 represent our own coin melted down, \$3,000,000 old and foreign material remelted, leaving \$10,000,000 approximately representing the annual product of gold used for industrial purposes in this country.

* * * * *

PRODUCT OF GOLD AND SILVER.

The product of the precious metals from the mines of the United States during the calendar year 1888 was presented in the special report on that subject issued from this Bureau.

The product was estimated to have been as follows:

Metal.	Fine ounces.	Commercial value.	Coining value.
Gold	1,604,841	\$33,175,000	\$33,175,000
Silver	45,783,632	43,020,000	59,195,000
Total		76,195,000	92,370,000
* * * * *			

The product of gold and silver from the mines of the United States, since 1878, has been as follows:

GOLD PRODUCT OF THE UNITED STATES.

Years.	Fine ounces.	Value.
1878.....	2,476,800	\$51,200,000
1879.....	1,881,787	38,900,000
1880.....	1,741,500	36,000,000
1881.....	1,678,612	34,700,000
1882.....	1,572,187	32,500,000
1883.....	1,451,250	30,080,000
1884.....	1,489,950	30,800,000
1885.....	1,538,325	31,800,000
1886.....	1,693,125	35,000,000
1887.....	1,596,375	33,000,000
1888.....	1,604,841	33,175,000

SILVER PRODUCT OF THE UNITED STATES.

Years.	Fine ounces.	Commercial value.	Coining value.
1878.....	34,960,000	\$40,270,000	\$45,200,000
1879.....	31,550,000	35,430,000	40,800,000
1880.....	30,320,000	34,720,000	39,200,000
1881.....	33,260,000	37,850,000	43,000,000
1882.....	36,200,000	41,120,000	46,800,000
1883.....	35,730,000	39,660,000	46,200,000
1884.....	37,800,000	42,070,000	48,800,000
1885.....	39,910,000	42,500,000	51,600,000
1886.....	39,440,000	39,230,000	51,000,000
1887.....	41,260,000	40,410,000	53,350,000
1888.....	45,780,000	43,020,000	59,195,000
* * * * *			

PRODUCT OF GOLD AND SILVER IN THE WORLD.

Calendar years.	Gold.		Silver.		
	Kilograms.	Value.	Kilograms.	Value at average price of silver for the year.	Value (coining rate).
1885.....	163,162	\$108,435,600	2,849,995	\$97,564,565	\$118,445,150
1886.....	159,741	106,163,877	2,902,471	93,297,290	120,628,800
1887.....	160,933	106,954,900	3,021,555	95,086,095	125,576,710
1888.....	159,490	105,994,150	3,427,265	103,550,260	142,437,150

For the purpose of comparison the following valuable tables, which have never before been published, kindly sent this Bureau by Dr. Adolf

Soetbeer, giving his latest estimates of the production of gold and silver in the world, for the same years, are presented:

PRODUCT OF GOLD IN THE WORLD.

Years.	Kilograms.	Value.
1885.....	154, 500	\$102, 578, 000
1886.....	161, 450	107, 133, 000
1887.....	160, 000	106, 314, 000
1888.....	160, 000	106, 267, 000

PRODUCT OF SILVER IN THE WORLD.

Years.	Kilograms.	Value at average price of silver for the year.	Value at coining rate.
1885.....	3, 176, 000	\$108, 861, 000	\$136, 000, 000
1886.....	3, 238, 000	103, 244, 000	138, 500, 000
1887.....	3, 414, 000	107, 242, 000	146, 000, 000
1888.....	3, 637, 000	109, 932, 000	155, 500, 000

* * * * *

WORLD'S COINAGE.

The value of the gold and silver coinages executed during the calendar years 1885, 1886, 1887, and 1888 by the nations of the world, so far as reported, is presented in a table in the Appendix.

In compiling this table, the silver coinages of foreign countries have been converted into United States money at their coining value.

This table is believed to include substantially the entire coinage of the world for the years named.

The following summary is presented:

WORLD'S COINAGE.

Calendar years.	Gold.	Silver.
1885.....	\$95, 757, 532	\$126, 764, 574
1886.....	94, 642, 070	124, 854, 101
1887.....	124, 992, 465	163, 411, 397
1888.....	134, 720, 639	149, 737, 442

The large increase, during the last two years, in the amount of gold and silver employed in coinage is worthy of note.

In regard to the silver coinage, it may be said that the only mints which are open to the coinage of silver for depositors are those of India, Mexico, and Japan.

The silver coinage of Mexico is unimportant, as a comparatively small amount remains in the country. The conversion of silver bullion into Mexican dollars is simply a convenient means of putting it into some merchantable shape for oriental trade.

The bulk of the silver coinage of Mexico is either remelted and used in other coinages or is absorbed by Asia.

* * * * *

Of the coinage of gold by the mints of the world during the year 1888, namely, \$134,720,639, at least \$25,559,213 are known to have consisted of coins remelted, thus reducing the supply of new coin during that year, to \$109,161,426.

Deducting from the total silver coinage of the year, viz, \$149,737,442, the recoinaiges reported, viz, \$28,749,923, and the Mexican silver coinage (less recoinage already deducted), viz, \$26,321,496, a total of \$55,071,351, the increase of the world's stock of silver coin during the year was \$94,666,108.

Over 89 per cent. of this was full legal-tender coin issued from the mints of the United States, India, and Japan.

* * * * *

PROPOSED LEGISLATION.

I have the honor to recommend that legislation looking towards the discontinuance of the coinage of the 3-dollar and 1-dollar gold pieces and the 3-cent nickel piece be requested of Congress.

With regard to the 3-dollar gold piece, it may be said that that denomination of coin serves no useful purpose, and that its present coinage is limited to a few proof coins sold at a profit by the Mint, to meet the demands of numismatic societies and coin collectors. There is no demand for it by the business public.

The same objections apply to the 1-dollar gold piece, with the additional ones that it is too small for circulation, and that the few pieces issued annually from the Mint are used almost exclusively for the purpose of ornament.

So long as statutory authority exists to coin this latter denomination, the suspension of its coinage by the Secretary of the Treasury is of doubtful legality. The most he has ever felt warranted in doing was to limit its coinage to pressing demands about the holiday season, and to maintain, unbroken, the series of coin sets sold by the Mint. The very limitation of its coinage leads to favoritism in the distribution of the few pieces struck annually, and to speculation in them.

The 3-cent nickel piece is open to the more important objection that it has so nearly the size and appearance of the 10-cent silver piece that it is frequently mistaken for it, much to the annoyance of the public, who receive it reluctantly.

It is further recommended that any act which may provide for the discontinuance of the coinage of these pieces, authorize their withdrawal from circulation as fast as received in the Treasury, and their recoinage into other denominations.

SUMMARY OF OPERATIONS OF THE MINTS AND ASSAY OFFICES.

The bullion deposited in the mints and assay offices of the United States during the fiscal year 1889 contained 2,623,413 standard ounces of gold and 35,627,273 standard ounces of silver of the total coining value for both metals of \$90,357,903.

* * * * *

SUMMARY OF THE WORK OF MINOR ASSAY OFFICES.

The following table recapitulates the work of the minor assay offices, including the mint at Denver, for the fiscal year 1889:

DEPOSITS, EARNINGS, AND EXPENDITURES OF MINOR ASSAY OFFICES, 1889.

Institutions.	Deposits.	Earnings.	Expenses.	Percentage of net expenses to deposits.
Denver	\$1,335,188.79	\$5,548.68	\$26,288.17	1.5
Helena.....	1,042,060.84	3,802.89	23,262.95	1.8
Boisé City.....	827,138.81	1,989.46	*12,187.32	1.2
Charlotte	167,605.29	945.21	4,747.34	2.2
St. Louis.....	303,692.61	929.31	†5,768.06	1.6
Total	3,675,686.34	13,215.55	72,253.84	

* Includes \$1,500 for "repairs of building and renovation of grounds."

† Includes \$480 for rent, pending repair of building.

OFFICE OF THE DIRECTOR OF THE MINT.

The first section of the act of February 12, 1873, revising and amending the laws relative to the mints, assay offices, and coinage of the United States (section 344, Revised Statutes), provides:

There shall be established in the Treasury Department a Bureau of the Mint, embracing in its organization and under its control all mints for the manufacture of coin, and all assay offices for the stamping of bars which are now, or which may be hereafter, authorized by law. The chief officer of said Bureau shall be denominated the Director of the Mint, and shall be under the general direction of the Secretary of the Treasury.

Soon after the passage of this act, Dr. Henry R. Linderman, who had been director of the mint at Philadelphia, and who was thoroughly conversant with all matters relating to coinage, both theoretically and practically, and with mint administration, was appointed by the President, Director of the Mint, in which capacity he served until his death January 27, 1879.

On March 5, 1879, Horatio C. Burchard, who had represented the Sixth District of Illinois in the National House of Representatives for a number of terms, was appointed Director of the Mint, and served until June 30, 1885.

Dr. James P. Kimball, who at the date of his appointment was professor of economic geology in Lehigh University, was appointed Director of the Mint July 1, 1885, and served until the date of his resignation, October 15, 1889.

The duties of the office of the Director of the Mint, under the act which established it, embrace the supervision of the work of the mints and assay offices, the preparation of rules and regulations for the transaction of business at those institutions, and the purchase of silver for subsidiary coinage and of minor coinage metal.

The Director of the Mint fixes the monthly allotments of coinage, approves or disapproves appointments, other than Presidential, and other changes in the force of the mints and assay offices, and the rate of compensation paid the employés.

Advances of public money for the expenses of the various institutions comprising the mint service, the examination of the monthly expense accounts of disbursements, and of the quarterly accounts of

the operations in bullion and coin, and the estimation of the value of foreign coins, are also among the duties of the office.

Since the passage of the act of February 28, 1878, which requires the purchase and coinage into silver dollars of silver bullion, "not less than two million dollars' worth per month, nor more than four million dollars' worth per month," the purchases of bullion for the silver-dollar coinage are passed on and recommended by the Director, although made by the Secretary of the Treasury.

All records relating to the purchase and delivery of silver bullion for monthly coinage of standard silver dollars are kept in the Bureau of the Mint.

The act making appropriation for sundry civil expenses of the Government for the fiscal year 1881, provided a sum "for the collection of statistics relative to the annual production of the precious metals in the United States." The task of gathering these statistics was assigned to the Director of the Mint, and subsequent appropriation acts placed their collection under his direction. This task has added largely to the work of the Bureau and necessitates the compilation and publication of an annual report. The first of the series of "Production Reports" was for the calendar year 1880.

More in consequence of information sought of this Bureau by public men and committees of Congress, than by force of statutory enactment, the compilation of the precious-metal statistics of this country as well as of the production, coinage, and movement of gold and silver in foreign countries, has become one of the most laborious as well as important duties of the Bureau. The gathering of these statistics was commenced by Dr. Linderman, immediately after his appointment as Director. They were enlarged and improved upon by his successor, Mr. Burchard, and still further perfected by my immediate predecessor, Dr. Kimball. As the compilation of these statistics has for many years been my special province, it will be my duty as well as pleasure, during my official career, to bring them as near completeness as possible.

The act of March 3, 1878, making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June 30, 1878, allotted the sum of \$500 "for fitting up an assay laboratory in the office of the Director of the Mint." Under the provisions of this and subsequent appropriation acts, a laboratory was established on the fourth floor of the Treasury building, and pieces of each denomination of coin taken from the first and two subsequent deliveries each week of gold and silver coins delivered by the coiners to the superintendents of the coinage mints, are sent to this Bureau to be tested as to weight and fineness. The laboratory has proved a valuable adjunct to the Bureau, enabling the Director to know from day to day whether the current coinage conforms to the requirements of law. Special examinations are also made in the laboratory, for the Treasury Department, of coins and other material, for the purpose of detecting and preventing counterfeiting, and for customs requirements. Work in the laboratory was temporarily suspended September, 1888, and the coins received at the Bureau tested at the assay office in New York City.

Mr. Cabell Whitehead, a graduate in metallurgy of Lehigh University, and who occupied a position as assayer in the mint at Philadelphia, and more recently in the assay office at Boise City, was appointed assayer in the office of the Director of the Mint, and entered on duty September 25, 1889. Since his appointment the coins reserved at the mints for monthly examination have been tested in the laboratory, and regular work in it has been resumed.

During the period that work in the laboratory was suspended several valuable improvements in apparatus were made, notably the introduction of two modern gas cupelling and two melting furnaces, also a new "Root" blower. The laboratory is now excellently equipped for efficient work.

The position of computer of bullion, made vacant by my appointment as Director, has been filled by the appointment of Mr. B. F. Butler, a gentleman well trained in the technical business of the mints, having occupied successively the positions of weigher, assistant coiner, and cashier, in the mint of the United States at New Orleans, for a period from September 25, 1878, to June 30, 1886.

It is with pleasure that I bear testimony to the zeal and fidelity with which the officers and employes, constituting the present clerical force of this office, have performed the official duties entrusted to them, and the valuable and untiring assistance which they have rendered me in the preparation of this report.

I am, very respectfully, yours,

EDWARD O. LEECH,
Director of the Mint.

Hon. WILLIAM WINDOM,
Secretary of the Treasury.

REPORT OF THE COMMISSIONER OF INTERNAL REVENUE.

TREASURY DEPARTMENT,
OFFICE OF INTERNAL REVENUE,
Washington, D. C., November 1, 1889.

SIR: I have the honor to submit the following report, covering the operations of the Bureau of Internal Revenue for the fiscal year ended June 30, 1889, together with certain additional information concerning the work performed during the first quarter of the current fiscal year.

* * * * *

COLLECTIONS FOR THE CURRENT FISCAL YEAR.

I estimate that the sum of \$135,000,000 will be collected from the various sources of internal revenue during the current fiscal year, provided, of course, that the existing laws and rates of taxation now imposed are maintained.

In the last annual report from this Bureau it was estimated that the receipts for the fiscal year ended June 30, 1889, would reach the sum of \$125,000,000.

It affords me pleasure to state that this estimate was exceeded by \$5,894,434.20, the actual receipts being \$130,894,434.20.

RECEIPTS FOR THE PAST EIGHT FISCAL YEARS.

Fiscal year ended—

June 30, 1889	\$130,894,434.20
June 30, 1888	124,326,475.32
June 30, 1887	118,837,301.06
June 30, 1886	116,902,869.44
June 30, 1885	112,421,121.07
June 30, 1884	121,590,039.83
June 30, 1883	144,553,344.86
June 30, 1882	146,523,273.72

COLLECTIONS FOR FISCAL YEAR ENDED JUNE 30, 1889.

The following statements exhibit in detail the amount of internal revenue collected during the fiscal year ended June 30, 1889, the sources from which the revenue was derived, the total sum collected in each district and State, the cost of collection, etc.:

INTERNAL-REVENUE RECEIPTS DURING THE LAST TWO FISCAL YEARS.

COMPARATIVE STATEMENT SHOWING THE RECEIPTS FROM THE SEVERAL OBJECTS OF INTERNAL TAXATION IN THE UNITED STATES DURING THE FISCAL YEARS ENDED JUNE 30, 1888 AND 1889.

Objects of taxation.	Receipts during fiscal year ended June 30—		Increase.	Decrease.
	1888.	1889.		
SPIRITS.				
Spirits distilled from apples, peaches, and grapes	\$799,296.19	\$1,165,371.91	\$366,075.72	
Spirits distilled from materials other than apples, peaches, and grapes	63,609,641.18	68,281,803.93	4,672,162.75	
Rectifiers (special tax)	168,316.70	166,645.77		\$1,670.93
Retail liquor-dealers (special tax)	4,331,040.99	4,296,780.04		34,260.95
Wholesale liquor-dealers (special tax)	392,129.08	391,975.28		153.80
Manufacturers of stills (special tax)	1,143.77	1,216.70	72.93	
Stills and worms manufactured (special tax)	2,410.00	3,160.00	750.00	
Stamps for distilled spirits intended for export	2,188.50	5,252.70	3,064.20	
Total	69,306,166.41	74,312,206.83	5,006,039.92	
TOBACCO.				
Cigars and cheroots	11,534,179.95	11,602,156.92	67,976.97	
Cigarettes	931,363.05	1,075,830.68	144,467.63	
Snuff	594,959.13	645,089.57	50,130.44	
Tobacco, chewing and smoking	16,154,049.05	17,076,899.94	922,850.89	
Dealers in leaf tobacco (special tax)	44,945.83	48,841.72	3,895.89	
Dealers in manufactured tobacco (special tax)	1,268,294.89	1,289,915.93	11,621.04	
Manufacturers of tobacco (special tax)	5,125.00	3,128.25	1,996.75	
Manufacturers of cigars (special tax)	116,398.09	120,195.53	3,797.44	
Peddlers of tobacco (special tax)	13,116.53	12,701.88		414.65
Total	30,662,431.52	31,866,860.42	1,204,428.90	
FERMENTED LIQUORS.				
Ale, beer, lager-beer, porter, and other similar fermented liquors	22,829,202.90	23,235,363.94	406,661.04	
Brewers (special tax)	175,164.66	178,593.95	3,429.29	
Retail dealers in malt liquors (special tax)	148,295.99	139,792.38		8,503.61
Wholesale dealers in malt liquors (special tax)	171,554.93	169,584.99		1,969.94
Total	23,324,218.48	23,723,835.26	399,616.78	
OLEOMARGARINE.				
Oleomargarine, domestic and imported	653,355.10	677,502.40	23,947.30	
Manufacturers of oleomargarine (special tax)	17,150.00	12,400.00		4,750.00
Retail dealers in oleomargarine (special tax)	123,258.54	130,631.51	7,372.97	
Wholesale dealers in oleomargarine (special tax)	70,376.24	73,914.00	3,537.76	
Total	864,139.88	894,247.91	30,108.03	

COMPARATIVE STATEMENT SHOWING THE RECEIPTS FROM THE SEVERAL OBJECTS OF INTERNAL TAXATION IN THE UNITED STATES, ETC.—Continued.

Objects of taxation.	Receipts during fiscal year ended June 30—		Increase.	Decrease.
	1888.	1889.		
BANKS AND BANKERS, NOT NATIONAL.				
Bank circulation.....	\$200.50	.....	.....	\$200.50
Banks, bankers, and other parties liable on amount of notes of any person, State bank, or State banking association, or of any town, city, or municipal corporation paid out by them.....	4,002.05	\$6,213.91	\$2,211.86	.....
Total.....	4,202.55	6,213.91	2,011.36	.....
MISCELLANEOUS.				
Collections not otherwise provided for....	9,768.87	6,078.48	.....	3,690.39
Penalties.....	155,547.61	84,991.89	.....	70,555.72
Total.....	165,316.48	91,070.37	.....	74,246.11
Aggregate receipts.....	124,826,475.32	130,894,434.20	6,567,958.88	.....
* * * * *	* * * * *	* * * * *	* * * * *	* * * * *

RECEIPTS BY STATES AND TERRITORIES DURING THE LAST FISCAL YEAR.

STATEMENT SHOWING THE AGGREGATE COLLECTIONS OF INTERNAL REVENUE BY STATES AND TERRITORIES DURING THE FISCAL YEAR ENDED JUNE 30, 1889.

States and Territories as constituted for the collection of internal revenue.	Aggregate collections.	States and Territories as constituted for the collection of internal revenue.	Aggregate collections.
Alabama.....	\$92,762.36	New Jersey.....	\$4,319,618.58
Arkansas.....	120,719.22	New Mexico (k).....	59,062.67
California (c).....	2,097,013.18	New York.....	15,648,675.01
Colorado (b).....	294,116.03	North Carolina.....	2,467,150.27
Connecticut (c).....	755,714.88	Ohio.....	11,563,727.51
Florida.....	424,082.75	Oregon (l).....	226,524.99
Georgia.....	436,119.14	Pennsylvania.....	8,520,796.56
Illinois.....	31,007,419.79	South Carolina.....	81,722.51
Indiana.....	5,788,236.34	Tennessee.....	1,066,335.77
Iowa.....	392,576.90	Texas.....	228,117.52
Kansas (d).....	183,432.22	Virginia.....	3,303,626.48
Kentucky.....	16,910,814.76	West Virginia.....	781,663.47
Louisiana (e).....	632,009.26	Wisconsin.....	3,096,495.92
Maryland (f).....	3,986,928.18	Total by States and Territories.....	130,894,419.70
Massachusetts.....	2,424,536.26	Cash receipts from sale of adhesive stamps*.....	14.50
Michigan.....	1,902,397.59	Aggregate receipts	130,894,434.20
Minnesota.....	1,377,796.84		
Missouri.....	7,730,608.20		
Montana (g).....	162,642.81		
Nebraska (h).....	2,248,624.19		
New Hampshire (i).....	469,351.54		

* See note a, p. 7.

a Including the State of Nevada.

b Including the Territory of Wyoming.

c Including the State of Rhode Island.

d Including the Indian Territory.

e Including the State of Mississippi.

f Including the State of Delaware, District of Columbia, and two counties of Virginia.

g Including the Territories of Idaho and Utah.

h Including Dakota.

i Including the States of Maine and Vermont.

k Including the Territory of Arizona.

l Including Alaska and the Territory of Washington.

TOTAL COLLECTIONS YEAR ENDED JUNE 30, 1889, IN STATES OR TERRITORIES
CONSOLIDATED WITH OTHER DISTRICTS.

Arizona (with New Mexico).....	\$31,614.93
Dakota (with Nebraska), estimated.....	90,000.00
District of Columbia (with Maryland).....	163,533.09
Delaware (with Maryland).....	244,271.06
Idaho (with Montana).....	26,569.80
Maine (with New Hampshire).....	53,637.84
Mississippi (with Louisiana).....	49,654.19
Nevada (with fourth California).....	25,564.20
Rhode Island (with Connecticut).....	286,193.68
Utah (with Montana).....	48,034.32
Vermont (with New Hampshire).....	22,341.48
Washington and Alaska (with Oregon).....	93,450.00
Wyoming (with Colorado).....	13,049.25

* * * * *

COST OF COLLECTION.

The cost of collection for the past fiscal year, distributed among the different items of appropriation, was approximately as follows:

For salaries and expenses of collectors, including pay of deputy collectors, clerks, etc., and including expenses incident to enforcing the provisions of law taxing oleomargarine.....	\$1,747,360.17
For salaries and expenses of revenue agents, surveyors of distilleries, gaugers, storekeepers, and miscellaneous expenses.....	2,107,637.00
For paper for internal-revenue stamps.....	44,563.31
For expenses of detecting and punishing violations of internal-revenue laws.....	29,138.03
For salaries of officers, clerks, and employes in the office of Commissioner of Internal Revenue.....	257,030.14
Total.....	4,185,728.65

The percentage of the cost of collection is a fraction less than 3.2 per cent., which is exactly the same as the percentage of cost for the fiscal year ended June 30, 1888. Owing to the great number of distilleries in operation during the last fiscal year, and the increased quantity of spirits produced, resulting in an increase of the taxes collected from that source, as compared with the receipts of the previous year, of more than \$5,000,000, as shown in the accompanying statements, the expenditures for the salaries of store-keepers, and the fees of gaugers were largely in excess of the amount estimated when the appropriation was made therefor. The result was, there were not funds enough to pay these officers in full for the month of June, 1889, and they have been paid up to the 8th of June only, leaving their accounts for the remainder of the month of June unpaid until an appropriation is made to cover this deficiency. The amount of this deficiency, as shown by accounts now on file, is \$107,637, and has been included in the cost of collection, as above stated, so that it appears that the increase in the cost of collection, as compared with the previous year, is in exact ratio with the increased collections.

As the provisions of section 3154, Revised Statutes, require the assignment of a store-keeper to every distillery warehouse established by law, and of sections 3287, 3295, and 3320, Revised Statutes, require the presence of a gauger at every distillery or rectifying establishment, whenever spirits are to be gauged, the employment of these officers was not only compulsory, but absolutely necessary to enable the proper officers to collect the taxes on distilled spirits and protect the interests of the Government, even after it became evident that the appropriation for their payment was insufficient.

The statement of the cost of collection does not include the cost of printing internal-revenue stamps, the appropriation for which is made directly to the Bureau of Engraving and Printing, and is not under the control of this office.

GENERAL CONDITION OF THE SERVICE.

The offices of the several collectors of internal revenue have been subjected to rigid and careful examinations as often during the past fiscal year as was possible with the limited force of revenue agents at my command. Besides these examinations, during the past fiscal year and up to the date of this report, the offices of fifty-two collection districts have been transferred to new collectors, and at each of these transfers the accounts of the collectors have been checked up, and the condition of the district carefully examined. I regard the general condition of the service throughout the country as very satisfactory.

MISCELLANEOUS EXPENSES.

The act of Congress approved August 7, 1882, making provision for sundry civil expenses for the year ending June 30, 1883, required the Commissioner of Internal Revenue to make a detailed statement of all miscellaneous expenditures in the Bureau of Internal Revenue for which appropriation was made in that act. In accordance with this requirement, I submit the following detailed statement of miscellaneous expenses incurred:

Express charges on public money forwarded by collectors and deputy collectors to depository	\$4,028.42
Telegraphing on public business	570.48
Locks for distilleries	3,174.80
Hydrometers for use in gauging spirits	6,294.07
Gauging rods	101.00
Stationery for internal-revenue officers	12,938.52
Internal-revenue record for internal-revenue officers	2,399.96
Federal reporter for office of the Commissioner	10.00
Compensation of United States attorneys in internal-revenue cases allowed under sections 827 and 838, Revised Statutes	1,551.50
Traveling expenses of clerks under special orders of the Department	136.53
Expenses of seizures and sales by collectors	122.05
Total	31,377.33

REVENUE AGENTS' DIVISION.

Twenty revenue agents have been employed during the last fiscal year—one as chief of division in this office, twelve in charge of territorial divisions, three in the examination of the offices and accounts of collectors, and four in assisting agents in charge of divisions, and on special duty.

EXPENSES OF REVENUE AGENTS.

There have been expended from the appropriation for salaries and expenses of revenue agents during the year the following amounts:

Aggregate salary of agents	\$44,549.00
Aggregate amount for traveling expenses	31,517.87
Stationery furnished agents	189.26
Transportation over Pacific railroads	627.72
Total	76,883.85

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ESTIMATED EXPENSES FOR NEXT FISCAL YEAR.

I estimate the expenses of the Internal Revenue Service for the fiscal year ending June 30, 1891, as follows:

For salaries and expenses of collectors, including pay of deputy collectors and clerks, and expense of enforcing the act of August 2, 1886, taxing oleomargarine, and the act of August 4, 1886, imposing on the Government the expense of the inspection of tobacco exported	\$1,800,000
For salaries and expenses of twenty revenue agents, for surveyors, for fees and expenses of gaugers, for salaries of store-keepers, and for miscellaneous expenses	2,100,000
For paper for internal revenue stamps	50,000
For detecting and bringing to trial and punishment persons guilty of violating the internal revenue laws, including payment for information and detection	50,000
For salaries of officers, clerks, and employes in the office of the Commissioner of Internal Revenue	261,590
For expenses incident to the enforcement of the act of October 12, 1888, for the prevention of the manufacture and sale of adulterated foods and drugs in the District of Columbia, which provides for the analysis of such articles under the direction of the Commissioner of Internal Revenue	5,000
Total	4,266,590
* * * * *	

TOBACCO DIVISION.

The aggregate amount of taxes collected from tobacco during the last fiscal year was \$31,866,860.42. This amount includes internal-revenue taxes paid by stamps on imported manufactured tobacco, snuff, cigars, and cigarettes.

The increase of collections for the last fiscal year over those for the previous fiscal year, was from—

Manufactured tobacco	\$922,850.89
Snuff	50,130.44
Cigars and cheroots	67,976.97
Cigarettes	144,467.63
Total increase of collections	1,185,425.93

The increase in the quantity of tobacco and snuff and in the number of cigars and cigarettes for the last fiscal year over those taxed during the previous fiscal year was:

Manufactured tobacco	pounds..	11,535,636
Snuff	do	626,631
Total	do	12,162,267
Cigars	number..	22,658,990
Cigarettes	do	288,789,260
Total	do	311,448,250

The export account shows an increase in manufactured tobacco of 118,183 pounds; an increase in the number of cigars exported of 266,700; and an increase in the number of cigarettes exported of 65,909,950.

The number of cigars imported during the fiscal year ended June 30, 1889, was 90,057,407. The value of the manufactured tobacco imported was \$70,353.

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PRODUCTION OF TOBACCO, SNUFF, CIGARS, AND CIGARETTES.

The production of tobacco, snuff, cigars, and cigarettes for the fiscal year ended June 30, 1889, computed from the receipts from stamps sold for all such goods as were put on the market for consumption, together with those removed in bond for export, and including importations, was:

TOBACCO AND SNUFF.

	Pounds.
Tobacco	213, 461, 249
Snuff	8, 063, 620
Total tobacco and snuff taxed.....	221, 524, 869
Tobacco and snuff exported.....	13, 622, 410
Total production for fiscal year 1889.....	235, 147, 279
Total production for fiscal year 1888.....	222, 866, 829
Total increase over fiscal year 1888.....	12, 280, 450

The increase of taxed tobacco and snuff over fiscal year 1888 was 12,162,267 pounds; of tobacco exported, 118,183 pounds.

CIGARS AND CIGARETTES.

	Number.
Cigars and cheroots.....	3, 867, 385, 640
Cigarettes.....	2, 151, 515, 360
Total taxed.....	6, 018, 901, 000
Cigars exported.....	1, 699, 325
Cigarettes exported.....	246, 679, 750
Total product for fiscal year 1889.....	6, 267, 280, 075
Total product for fiscal year 1888.....	5, 889, 655, 175
Increase.....	377, 624, 900

The increase of taxed cigars was 22,658,990; of taxed cigarettes, 288,789,260; of cigars exported, 266,700; and of cigarettes exported, 65,909,950.

SPECIAL-TAX PAYERS.

Special tax year ended April 30, 1889.

Manufacturers of tobacco.....	902
Manufacturers of cigars and cigarettes.....	20, 684
Peddlers of tobacco.....	3, 360
Dealers in leaf tobacco.....	3, 831
Dealers in leaf tobacco, not exceeding 25,000 pounds.....	1, 041
Retail dealers in leaf tobacco.....	1
Dealers in manufactured tobacco.....	590, 013
Total.....	618, 132
Special-tax payers previous fiscal year, as computed.....	554, 402
Increase during special-tax year 1889.....	63, 730

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DIVISION OF DISTILLED SPIRITS.

The statements under the above heading relating to the fiscal year ended June 30, 1889, exhibit the number of grain, molasses, and fruit distilleries which were registered and operated in each State and collection district; the number and capacity of the grain and molasses distilleries in operation at the beginning of each month in the year and of the three following months; the number of grain distilleries, classified according to their different capacities, registered and operated in each district and State; the quantities and several kinds of grain and other materials used in the production of distilled spirits in each State and collection district; the different kinds of fruit brandy produced during the year in each State and collection district; the quantity of distilled spirits, in proof-gallons, rectified in the several districts and States; and the number of cattle and hogs fed at the registered grain distilleries, together with other items.

DISTILLERIES REGISTERED AND OPERATED.

The following statement shows the number of distilleries registered and operated during the fiscal year ended June 30, 1889:

States and Territories.	Grain.		Molasses.		Fruit.		Total registered.	Total operated.
	Registered.	Operated.	Registered.	Operated.	Registered.	Operated.		
Alabama.....	1	1	.....	.....	63	63	64	64
Arkansas.....	33	31	.....	.....	54	54	87	85
California.....	2	2	.....	.....	273	260	275	262
Connecticut.....	1	1	.....	.....	52	52	53	53
Georgia.....	87	82	.....	.....	95	95	182	177
Illinois.....	21	18	.....	.....	23	20	44	38
Indiana.....	11	11	.....	.....	56	56	67	67
Iowa.....	.....	.....	.....	.....	3	3	3	3
Kansas.....	.....	.....	.....	.....	1	1	1	1
Kentucky.....	348	297	1	1	299	286	648	584
Louisiana.....	.....	.....	.....	.....	12	12	12	12
Maryland.....	26	23	.....	.....	39	39	65	62
Massachusetts.....	1	1	8	8	6	6	15	15
Minnesota.....	2	2	.....	.....	.....	.....	2	2
Missouri.....	34	30	.....	.....	55	49	89	79
Nebraska.....	3	1	.....	.....	.....	.....	3	1
New Mexico.....	.....	.....	.....	.....	6	5	6	5
New Hampshire.....	.....	.....	1	1	1	1	2	2
New Jersey.....	1	1	.....	.....	71	71	72	72
New York.....	2	2	.....	.....	56	56	58	58
North Carolina.....	524	470	.....	.....	863	863	1,387	1,333
Ohio.....	31	25	.....	.....	43	43	74	68
Oregon.....	2	2	.....	.....	9	9	11	11
Pennsylvania.....	104	96	.....	.....	20	20	124	116
South Carolina.....	15	15	.....	.....	14	14	20	20
Tennessee.....	84	71	.....	.....	245	245	329	316
Texas.....	7	7	.....	.....	18	18	25	25
Virginia.....	91	70	.....	.....	710	699	801	769
West Virginia.....	4	4	.....	.....	30	32	43	36
Wisconsin.....	5	4	.....	.....	.....	.....	5	4
Total.....	1,440	1,267	10	10	3,126	3,072	4,576	4,349

GRAIN AND MOLASSES DISTILLERIES IN OPERATION SEPTEMBER 1,
1880 TO 1889.COMPARATIVE STATEMENT SHOWING THE NUMBER AND CAPACITY OF GRAIN AND
MOLASSES DISTILLERIES IN OPERATION ON THE 1ST DAY OF SEPTEMBER IN EACH
OF THE YEARS 1880 TO 1889, INCLUSIVE.

Date.	Number of distilleries.		Capacity of grain distilleries.		Capacity of molasses distilleries.		Total spirit-producing capacity per day.
	Grain.	Molasses.	Grain.	Spirits.	Molasses.	Spirits.	
			<i>Bushels.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
September 1, 1880	372	6	69,013	275,364	8,899	7,564	282,928
September 1, 1881	298	5	70,193	272,806	8,573	7,287	280,093
September 1, 1882	198	7	57,755	227,973	10,426	8,861	236,834
September 1, 1883	387	7	56,859	224,107	8,721	6,818	230,925
September 1, 1884	294	8	47,855	189,308	8,814	7,424	196,732
September 1, 1885	212	8	42,594	174,295	7,122	6,054	180,349
September 1, 1886	305	9	46,180	181,223	8,853	7,524	188,747
September 1, 1887	293	8	50,355	199,100	6,460	5,493	204,593
September 1, 1888	399	5	33,294	141,963	4,465	3,798	145,761
September 1, 1889	376	5	40,946	172,526	3,574	3,037	175,563

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The total number of grain, molasses, and fruit distilleries registered and operated during the year is 4,576 and 4,349, respectively.

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COMPARATIVE STATEMENT OF MATERIALS USED AND SPIRITS PRODUCED DURING
THE LAST TEN (FISCAL) YEARS.

Year.	Grain used.	Spirits produced.	Molasses used.	Rum produced.
	<i>Bushels.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
1880	24,006,359	87,915,969	3,110,190	2,439,301
1881	31,291,175	115,609,644	2,710,307	2,118,506
1882	27,459,095	104,149,077	2,121,804	1,704,084
1883	18,644,787	72,235,175	2,373,106	1,801,960
1884	18,927,082	73,724,581	2,259,536	1,711,158
1885	17,865,203	72,834,198	2,719,416	2,081,165
1886	19,195,332	78,544,428	2,308,130	1,799,952
1887	17,959,565	75,974,376	2,428,783	1,857,223
1888	16,122,509	68,388,160	2,519,494	1,891,246
1889	20,990,924	87,887,456	1,951,104	1,471,054
Total	212,462,931	837,263,064	24,501,870	18,875,649
Average	21,246,293	83,726,306	2,450,187	1,887,564

The quantity of grain used in the production of spirits during the fiscal year ended June 30, 1889 (20,990,924 bushels), is an increase of 4,868,415 bushels over the amount used in the preceding fiscal year (16,122,509 bushels), and is 255,369 bushels less than the average (21,246,293 bushels) for the last ten years.

The number of gallons of spirits produced from grain during the year (87,887,456 gallons) shows an increase of 19,499,296 gallons over the product (68,388,160 gallons) of the year ended June 30, 1888, and is 4,161,150 gallons more than the average produced (83,726,306 gallons) for the last ten years.

The yield of spirits from each bushel of grain is 4.18+ gallons. The yield for the two preceding years was 4.23+ for 1887 and 4.24+ for 1888.

The quantity of molasses used for the production of rum during the fiscal year (1,951,104 gallons) shows a decrease of 568,390 gallons from

the quantity used in the previous year (2,519,494 gallons), and is 499,083 gallons less than the average (2,450,187 gallons) for the last ten years.

The quantity of rum distilled from molasses during the fiscal year (1,471,054 gallons) shows a decrease of 420,192 gallons from the product of the previous year (1,891,246 gallons), and is 416,510 gallons less than the average product (1,887,564 gallons) for the last ten years.

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STOCK FED AT DISTILLERIES.

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The following statement shows the number of cattle and hogs fed at registered grain distilleries, arranged by States :

States.	Number of cattle fed.	Total increase in weight.	Average increase in weight.	Number of hogs fed.	Total increase in weight.	Average increase in weight.	Total increase in weight of cattle and hogs.
Arkansas.....	112	20,300	181+	1,062	89,880	84+	110,180
California.....	.....	.....	.....	1,433	303,160	211+	303,160
Connecticut.....	102	30,600	300	.....	.....	.....	30,600
Georgia.....	412	61,800	150	2,700	243,000	90	304,800
Illinois.....	20,175	5,037,074	249+	.....	.....	.....	5,037,074
Indiana.....	4,635	1,138,350	245+	20	2,000	100	1,140,350
Kentucky.....	20,394	4,839,890	212+	15,237	648,363	42+	4,988,253
Maryland.....	65	12,100	186+	669	63,632	95+	75,732
Massachusetts.....	100	25,000	250	30	9,000	300	34,000
Minnesota.....	142	55,380	390	.....	.....	.....	55,380
Missouri.....	1,471	75,410	51+	1,488	85,068	37+	160,478
Nebraska.....	2,014	494,000	245+	.....	.....	.....	494,000
New Jersey.....	317	88,760	280	.....	.....	.....	88,760
New York.....	584	109,800	185+	.....	.....	.....	109,800
North Carolina.....	359	42,675	109+	4,044	246,088	60+	288,713
Ohio.....	1,825	496,572	272+	394	28,628	72+	525,200
Oregon.....	.....	.....	.....	120	3,060	25+	3,060
Pennsylvania.....	1,213	281,552	232+	3,638	291,514	80+	573,066
Tennessee.....	754	182,700	242+	4,196	351,128	83+	533,828
Texas.....	.....	.....	.....	115	5,750	50	5,750
Virginia.....	79	10,610	134+	963	94,735	98+	105,345
West Virginia.....	109	13,080	120	109	9,156	84	22,236
Wisconsin.....	346	87,000	251+	007	1,400	200	88,400
Total.....	55,238	12,602,653	228+	36,225	2,475,512	68+	15,078,165

SUMMARY.

Number of cattle fed at registered grain distilleries in the United States.....	55,238
Total increase in weight of cattle.....	pounds.. 12,602,653
Average increase in weight of cattle.....	do..... 228+
Number of hogs fed at registered grain distilleries in the United States.....	36,225
Total increase in weight of hogs.....	pounds.. 2,475,512
Average increase in weight of hogs.....	do..... 68+
Total number of cattle and hogs fed.....	91,463
Total increase in weight of cattle and hogs.....	pounds.. 15,078,165
Average increase in weight of cattle and hogs.....	do..... 164+

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REPORT OF THE MICROSCOPIST ON THE ANALYSES OF SUSPECTED WHISKY.

During the past year many samples of whisky were sent in for analysis to ascertain whether they had been artificially colored by the addition of caramel or other coloring matter. To establish a standard by which such samples could be judged, the collectors of internal revenue of the ninth district of Pennsylvania and of the seventh district of Kentucky were requested to obtain samples of one, two, three, and

four year old whiskies direct from distillers who were known as not employing any artificial means to either color or age their goods.

There appears to be a class of distillers who desire to market their product as soon as possible, and who, by heavily charring their barrels, adding a little caramel or prune-juice, or by some of the so-called aging processes, endeavor so to color their new and colorless whiskies as to deceive the consumer.

FERMENTATION.

In the manufacture of both malt and distilled liquors the object is to convert the starch of the grain employed, by suitable fermentation, into alcohol. In the one case a low percentage of alcohol is striven for, and in the other the maximum amount that is capable of being produced.

Chemically speaking, fermentation takes place wherever an organic compound undergoes changes of composition under the influence of a nitrogenous substance called a ferment, which acts in small quantities and yields nothing appreciable to the fermented substance. These ferments are living minute vegetable cells, and different varieties are found in the various fermentations with which we are familiar, viz, alcoholic, acetic, lactic, butyric, etc.

In normal alcoholic or spirituous fermentation we find the minute vegetable cells commonly called yeast growing and multiplying, assimilating the *sugar* or *glucose* found in the infusion or solution (whether the glucose is derived from the starch of the grain, by the action of another ferment called diastase, or artificially prepared), and excreting a large proportion in the form of *carbonic acid* and *alcohol*.

Theoretically 105.3 parts of glucose, corresponding to 100 parts of cane sugar, would produce about 51 parts of alcohol and 49 parts of carbonic acid, but as a matter of fact Pasteur and other investigators have found that there were small quantities of other products present, so that the theoretical yield is not obtained.

The materials from which alcohol can be produced by fermentation may be arranged in three groups: first, grapes and other sweet fruits which contain fermentable sugar or glucose, the expressed juice of which at once enters into fermentation on exposure to air; second, substances which contain common or cane sugar; the first step in the process of fermentation being the formation of glucose by taking up the elements of water; and, third, the various kinds of grains, potatoes, and other substances containing starch, which by the action of a peculiar ferment, diastase, naturally or by the action of dilute mineral acids artificially, is converted into glucose.

Under the general name of ferment or yeast a large number of varieties and species are included, which resemble each other in form but differ greatly in their properties and characters. The germs of these yeasts are everywhere floating in the air, especially in the hot summer months, and when they encounter a favorable soil for their development they grow and multiply like other plants under similar conditions; for instance, when they attach themselves to the stems and skins of fruit they give rise to the "spontaneous" fermentation of grapes, apples, pears, etc.

In addition to the yeast germs, the air of any locality contains numerous living organisms, the mold, bacteria, and other micro-fungi, for the most part injurious to the making of the wort and forming the true ferments of disease.

Among all these ferments several species will set up alcoholic fermentation in the wort and transform it into alcohol and carbonic acid, but

all of them will not give a good product. On the contrary, the great majority of these spontaneous yeasts would have disastrous effects, for the brewer especially, decomposing the beer to such an extent as to render it unsalable.

The species called *Saccharomyces cerevisia* constitutes the large class of beer yeast proper, and the one the best known and studied. Two varieties of *Saccharomyces cerevisia* are extensively cultivated, the high or upper (Obergährung, fermentation haute) and the inferior or lower (Untergährung, fermentation basse). The former is used with a high, 15° to 18° C. (59° to 65° Fahr.), temperature, the yeast and impurities rising to the top of the vat, whence they are removed by skimming; and the latter at a low temperature, between 4° and 10° C. (39° to 50° Fahr.), where the fermentation takes place slowly and the yeast settles at the bottom in a compact mass. Each variety will produce its own peculiar and characteristic fermentation. A mixture of either of these varieties with one or several other species of *Saccharomyces* as *Sacch. ellipsoidens*, *mycoderma*, etc., results in disaster to the wort.

The wort naturally presents a proper soil for these harmful as well as for the proper or true ferments, and it is not surprising that the germs of the noxious flourish and develop to the detriment of the true yeast plant.

These yeast plants and germs are so minute as to require the use of a microscope with high power objectives to discern and differentiate them. Like all other fungi they are capable of distinct cultivation, and with the exercise of some care, and the assistance of a trained observer, a brewer or distiller, after some experiments, could maintain a crop of such particular yeast plant as yields the best results and gives a uniform product.

This method of "pure" cultivation has been extensively employed in breweries in Denmark, Germany, and elsewhere in Europe, and there is no scientific reason why the same system should not be carried on in this country to the great improvement of our beers.

At the old Carlsberg brewery near Copenhagen, Professor Hansen has cultivated two varieties of bottom *Sacch. cerv.*, which give different results in practice. One gives a beer well adapted for bottling, and is chiefly employed for home use. The other gives a good draught beer, containing more carbonic acid than the former variety; it is not adapted for bottling, but is much preferred by German brewers, and is therefore chiefly cultivated for export.

Experiments upon an industrial scale are being carried on at Burton-on-Trent, in England, with different species of pure yeast. Several varieties of *Sacch. cerv.* have been separated from the yeast generally employed and cultivated, which, when used on a practical scale, give entirely different results, both as to flavor, brightening, attenuation, and mode of separation of the yeast. Experiments have also shown that these characteristics can be maintained unimpaired throughout a very great many successive fermentations in the brewery. Cultivations have been started from a single yeast cell, and with proper care have been maintained for a long time.

On a commercial scale the cultivation should be conducted in sufficiently large vessels to yield the necessary amount of yeast used for fermentation. For this purpose two vessels should be employed, one in which the wort used for cultivation is sterilized by being boiled, then stirred and aerated, excess of pressure being prevented by means of air filtered through sterilized cotton; into the other (the fermenting vessel, previously sterilized by steam) the sterilized zwort is forced, and

pure yeast from the laboratory added. When the fermentation is at an end the liquid is run off, the apparatus filled with wort, stirred, and very nearly emptied. The wort so obtained, and containing yeast, is then transferred to the brewing vessels; the residue in the apparatus, with the addition of sterilized wort, serves for the future production of yeast. Pure yeast can thus be continually obtained without fresh inoculation, as the small amount remaining in the fermenting vessel serves this purpose. These vessels are jacketed and provided with the necessary safety-valves, ventilators for admitting filtered air, exit tubes for the escape of steam and carbonic acid, thermometers and manometers for regulating temperature and pressure, and inlets and outlets for wort, beer, and yeast.

DISTILLATION.

The object of the distiller is to separate the alcohol contained in the fermented wort from the foreign matter with which it is associated. For this purpose he has resort to a still. The alcohol thus produced is not, as has been well known for some time, a single substance, homogeneous, always the same in its nature, form, and effects; on the contrary, it is an extremely variable body, of diverse chemical composition and physical characteristics; it is not *one* alcohol but many, which chemists have divided into several series.

The distiller commonly divides the product of his still into three classes: (1) Products with a bad taste, the heads; (2) alcohol, properly speaking; and (3) products with a bad taste, the tails. The first and third are kept separate from the middle, which is the most valuable portion. The following table, according to Dr. Rabuteau, gives the boiling points of these different products:

Products of distillation.	Boils at—	
	Degrees Centi-grade.	Degrees Fahrenheit.
Products with a bad taste, the heads:		
Aldehyde.....	20.8	69.4
Acetic ether.....	72.7	162.9
Alcohol, grain spirits, ethyl alcohol.....	78.0	172.4
Products with a bad taste, the tails:		
Propyl alcohol.....	97.0	206.6
Butyl alcohol.....	109.0	228.2
Amyl alcohol.....	132.0	269.6
Valerianic ether.....	133.0	271.4
Amyl acetate and other nameless products.....	136.0	276.8

It is fortunate that the products of the first class have such low boiling points that they can be got rid of very easily by fractional distillation, for they are dangerous poisons.

Aldehyde is a colorless, easily mobile liquid, having a specific gravity of 0.8009 at 0° C. (Kopp). Its vapor density was found by Liebig to be 1.532, who also states that when inhaled in large quantities the vapors, of a peculiar ethereal suffocating odor, produce a cramp, which for a few seconds takes away the power of respiration. (Isidore Pierre compares its action to that of sulphurous acid.) It is miscible with water in all proportions, heat being evolved, and it is likewise soluble in both alcohol and ether. The addition of water raises the boiling point of aldehyde. It absorbs oxygen and is slowly converted into acetic acid. (Roscoe and Schorlemmer's Chemistry).

Ethyl acetate or acetic ether is a mobile liquid possessing a penetrating, refreshing smell and a pleasant burning taste. It has a specific gravity of 0.91046 at 0° C. (Kopp). Its vapor density was found by Boullay and Dumas to be 3.016. It mixes with alcohol, ether, acetic acid, etc., in all proportions, and dissolves a large number of resins, oils, and other organic bodies. Its action in many cases, when used as medicine, resembles that of common ether, but it possesses a more agreeable taste and smell. It is also used for addition to the poorer classes of wine, liqueurs, etc. (Roscoe and Schorlemmer's Chemistry). According to Prof. Dujardin-Beaumetz the toxic dose of aldehyde is from 1 to 1.25 grams, and that of acetic ether 4 grams per kilogram of the weight of the animal.

The properties of ethyl, spirits of wine, and methyl alcohols have already been described (Report Commissioner Internal Revenue, 1888, p. CXIV).

The tails or faints, as well as the still less volatile or ordinary fusel oil, are mixtures of several alcohols and fatty acid ethers, their relative quantities depending on the nature of the materials used in mashing, belonging to the higher series of alcohols, and consequently possessing greater toxic effects.

Propyl alcohol was discovered by Chancel in 1853 in small quantities in fusel oil obtained in the manufacture of wine-brandy. It resembles ethyl alcohol in its odor. It has a specific gravity of 0.8198 at 0° C., and boils, according to various observers, from 96° to 98° C. The latter number is probably the correct one, as the boiling points of the normal alcohols increase 19.6° C. for every increment in composition of CH_2 (Grimshaw and Schorlemmer). It is miscible in all proportions with water, but, on the addition of easily-soluble salts, as calcium chloride, etc., it separates out from aqueous solutions. Propyl alcohol is not used in the arts or manufactures, but is chiefly employed in scientific research (Roscoe and Schorlemmer's Chemistry). It is, toxically, more active than ethyl alcohol, the dose is from 3 to 4 grams per kilogram of the weight of the animal.

Butyl alcohol occurs in varying quantities in several fusel oils, and is especially found in the spirits from beet-root, potatoes, and grain. It was discovered by Wurtz in 1852. It is a somewhat mobile liquid, possessing a spirituous smell, but at the same time a fusel-oil odor, resembling that of syringa flowers. It boils at 108° to 109° C., and has a specific gravity of 0.817 at 0° C. At ordinary temperatures it dissolves in ten parts of water, and the greater part is separated from solution on the addition of easily-soluble salts, chloride of calcium, common salt, etc. According to Rabuteau it is toxically four times as active as ethyl alcohol, its dose being 2 grams per kilogram of the weight of the animal. It has a toxic action on the heart and blood, producing muscular trembling and in large doses convulsive spasms.

Amyl alcohol was so called by Cahours because it was chiefly found in spirits obtained from bodies containing starch (amylum). It is commonly called potato spirits. It has been found since to occur in all fusel oils. Amyl alcohol was for a long time considered to be one distinct compound. Biot first drew attention to the fact that this body possesses the power of rotating the plane of polarized light to the left, and Pasteur, in 1855, pointed out that the rotary powers of different samples of amyl alcohol vary according to the source from which they are obtained. From this he concluded that the body termed amyl alcohol is a mixture in varying proportions of an optically active and an optically inactive compound. He succeeded in obtaining the two mod-

ifications of the alcohol, and experiments of later investigators have established that they do not possess an identical chemical constitution. Fermentation amyl alcohol is a colorless, highly refracting liquid, possessing a burning taste and a penetrating smell, boiling at 131° – 132° C., and solidifying at -21° C. Inhalation of its vapors produces difficulty of breathing, coughing, headache, and giddiness. (Roscoe and Schorlemmer's Chemistry). It kills rapidly, according to Dujardin-Beaumez, in doses of from 1.59 to 1.75 grams per kilogram of the weight of the animal. Even in small doses it exerts a powerful effect, bringing about intoxication and coma, producing at first a violent excitement of the nerve centers, followed by depression of the sensitive and motive forces.

Valerianic ether is a colorless liquid, having an irritating taste, and an odor which has been compared to that of apples; is met with in an extremely small proportion in fusel oils. The same is true in regard to amyl acetate, a colorless liquid of a peculiar and irritating taste, of an odor that recalls that of pears. Both of these substances have been little studied by chemists.

In short, very complex in their compositions, which are still very imperfectly known, the "spirits" of commerce not only contain the ethyl, propyl, butyl, and amyl series of alcohol compounds, on which most research has been concentrated, but also a certain number of other products, as pyridin and several aldehydes of unknown composition.

Drs. Laborde and Magnan submitted a report to the French Academy of Medicine, October 21, 1888, giving the results of their experiments with the higher alcohols and artificial bouquets, in regard to their toxic effects on animals, comparing the effects of the natural products with those of the artificial products. (Rev. Ques. 4 s., T. 2, 1888, pp. 1369, 1423.)

All spirits consist of a more or less diluted ethyl alcohol containing traces of the higher-boiling compounds, commonly called fusel oil, the proportion depending on the care exercised by the distiller in stopping the distillation when the vapor temperature rises above the boiling point of ethyl alcohol, and certain flavoring bodies depending on the material employed. The deleterious effects of raw spirits are attributable to the presence of these higher-boiling alcohols, which by slow oxidation, by exposure to the air, are more or less changed and converted into certain ethers which are comparatively harmless.

Few accurate experiments have been made on the actual proportions of amyl alcohol present in whiskies. According to Dupré, a sample of Scotch whisky contains 0.19; of "Cape Smoke," 0.24, and of "Common Samshoe," of 0.18 of amyl alcohol per 100 parts of ethyl alcohol.

A large proportion of the cheapest whiskies found in our markets is made by rectifiers by diluting "pure neutral" or "cologne" spirits to proof strength with water, adding some burnt sugar, caramel, or prune juice to color it, and certain artificial essences with a little tannin to give the desired flavors. Innumerable recipes are known to the trade for compounding from a barrel of cologne spirits, brandy, whisky, either rye or bourbon, and gin as may be required. A slightly higher grade of cheap whisky is made by adding one part of a highly flavored whisky to three parts of cologne spirits, diluted to proof strength.

Raw spirits are colorless, or nearly so, and if stored in glass or earthenware vessels would so remain, but if kept in oaken barrels they gradually acquire a lighter or darker topaz color. If the staves of the barrel are heavily charred the spirits rapidly acquire a blackish topaz

color, and if stored in a warm room or if the contents of the barrel are raised to nearly the boiling point by the introduction of a steam coil (the so-called aging process), the color becomes very dark in less than twelve hours.

* * * * *

INCREASED PRODUCTION OF SPIRITS.

The quantity of spirits (89,358,510 gallons) produced and deposited in distillery warehouses during the fiscal year ended June 30, 1889, is more than the production (70,279,406 gallons) of the year 1888 by 19,079,104 gallons. The difference is distributed among the different kinds known to the trade as follows:

Increase in the production of—	Gallons.
Bourbon whisky	14, 497, 175
Rye whisky	2, 870, 078
Gin	156, 978
High wines	13, 059
Pure, neutral, or cologne spirits	963, 441
Miscellaneous	1, 135, 069
Total increase	19, 635, 800
Decrease in the production of—	Gallons.
Alcohol	136, 504
Rum	420, 192
Total decrease	556, 696
Net increase	19, 079, 104
* * * * *	*

ALCOHOL IN THE INDUSTRIAL ARTS.

My attention has been called to the provisions relative to alcohol in the industrial arts to be found in the bill (House Report 9051, Fiftieth Congress, first session) to reduce taxation and simplify the laws in relation to the collection of the revenue.

I find these provisions to be comprised in sections 3 to 11 of said bill, briefly stated, as follows:

Section 3 provides for bonded warehouses for the storage of the alcohol. These are to be in charge of internal-revenue store-keepers, and under regulations of this office and of the Secretary of the Treasury.

Section 4 provides for the transfer of the alcohol from distillery warehouses to the bonded alcohol warehouses provided in section 3.

Section 5 provides for the removal of alcohol from the bonded alcohol warehouses to manufacturers' store-rooms, to be there used in the industrial arts and in the manufacture of drugs and chemicals, proprietary articles and beverages being excepted. This section also provides certain regulations under which bonded alcohol warehouses and manufacturers' store-rooms may be established.

Section 6 provides for the use of warehouse stamps.

Section 7 makes further provision for removals from bonded alcohol warehouses to manufacturers' store-rooms.

Section 8 provides for books and returns of store-keepers at manufacturers' store-rooms, and gives the officers right of access to every part of the manufactory.

Section 9 provides for the methylation of alcohol in the bonded alcohol warehouses and for the use of methylated spirits in the arts and manufactures, for burning, and in the manufacture of compounds except

beverages. The permits to use such spirits may be engraved. Bonds and returns may be exacted. Right of access of internal-revenue officers to places where methylated spirits are used is provided. Penalties are imposed to prevent frauds.

Section 10 provides for books and returns of proprietors of bonded alcohol warehouses and manufacturers. Penalty for improper use of alcohol.

Section 11 provides for assessing taxes on spirits not used within three years, forbids use of methylated spirits within 600 feet of a rectifier or distiller, and imposes penalties for non-compliance with the various provisions of the law and regulations.

Should this office be charged with the execution of a law of the kind under consideration, full authority should be conferred upon the Commissioner to regulate the matter, with the approval of the Secretary of the Treasury.

The bill in question appears to confer such authority in all the important cases.

Sections 3, 4, 5, 7, 9, and 10 contain such provisions.

It is suggested, however, that the word "forty-nine" be substituted for "thirty-nine," in line 27 of section 9. This will give full scope to the word "twenty-five" in line 24. Also, that the prohibition in lines 41 to 45 of said section be so modified as to provide that no methylated spirits shall be permitted on any premises in which the business of distilling or rectifying is carried on, or where the business of storing, selling, or offering for sale distilled spirits or wines used and sold as beverages, or in the opinion of the Commissioner of Internal Revenue capable of being so used or sold.

* * * * *

DISTILLED SPIRITS IN THE UNITED STATES OCTOBER 1, 1889.

The quantity of distilled spirits in the United States, except what may be in customs bonded warehouses, on the 1st day of October, 1889, was 102,650,982 gallons, this quantity being distributed as follows:

	Gallons.
In distillery and special bonded warehouses.....	62,674,200
In hands of wholesale liquor dealers.....	15,255,882
In hands of retail liquor dealers.....	24,720,900
Total.....	102,650,982

In making the above computation the average stock of each retail liquor dealer in the United States is estimated at 150 gallons.

* * * * *

OLEOMARGARINE.

The average monthly production of oleomargarine during the fiscal year was 2,972,002 pounds; that the average monthly production for the previous year was 2,860,460 pounds, and that the average monthly production during the eight months ended June 30, 1887, was 2,711,823 pounds. It also appears that the average monthly quantity withdrawn from factories on payment of the tax was as follows:

	Pounds.
During the eight months ended June 30, 1887.....	2,592,946
During the fiscal year ended June 30, 1888.....	2,707,430
During the fiscal year ended June 30, 1889.....	2,821,970

* * * * *

REPORT OF THE MICROSCOPIST.

ADULTERATION OF FOODS.

SIR: Since the approval of the Act "to prevent the manufacture or sale of adulterated food or drugs in the District of Columbia," October 12, 1888, to date* there has not been a single sample submitted for analysis, as provided for in section 11 of the Act. This result may be ascribed to the apathy of the general public, and that of the health department of the District. This office has brought the subject to the attention of the Commissioners of the District, the health department, and the local press by letters and by furnishing them with copies of the law, regulations, and blank forms of applications, but has not succeeded in enlisting their active co-operation.

* * * * * *

NEED OF A NATIONAL LAW.

That a national law to regulate the sale of adulterated articles of food is needed in this country, where the manufacture and sale of adulterated foods of all kinds is carried on more openly and on a larger scale than in foreign countries, goes without question, and it is a great pity that the law intended for this capital city should prove a dead letter from the outset, because of the lack of certain administrative features and clear definitions. It, therefore, seems desirable to have the law amended in these regards. With the experience gained in enforcing a proper food-adulteration law in the District of Columbia, the extension of its provisions to all territory over which the United States has exclusive jurisdiction would readily follow, and finally it could be so enlarged as to embrace all adulterated articles of food intended for consumption sold in any State or Territory other than where produced. With the co-operation of the different State and local authorities a very thorough supervision over such foods could be maintained. A national law would not apply to adulterated articles of food manufactured and sold in the State or Territory where produced, unless it should take the form of a revenue measure, imposing a tax on the manufacturers of and dealers in such commodities.

The different State laws on food adulteration are, with one or two exceptions, entirely inoperative. Being drawn up with the idea that an adulterated article of food is necessarily injurious to health, these laws fail to reach the great majority of cases where cheap and harmless substitutes are used.

* * * * * *

LIST OF BRANDS OF ADULTERATED FOOD PRODUCTS.

The following lists of brands of food products that have been found on analysis to be adulterated, have been compiled from the reports of the Massachusetts State Board of Health, those of the State Dairy Commissioner of New Jersey, and those of the Department of Inland Revenue of Canada, published within the last five years.

BAKING-POWDERS.

These may be said to be the makeshift of the lazy and ignorant bread-maker. They all administer a medicinal dose, having more or less effect on the human economy, depending on the nature of the ingredients used, from Rochelle salts, where cream of tartar and alkaline bicarbonates are employed, to a strong astringent, where alum is used. They are all sold at an immense profit, even if chemically pure salts were employed, which is seldom the case, the ordinary commercial product answering sufficiently well. No pound sample should cost more than 25 cents.

ALUM BAKING-POWDERS.

A. & P. (Atlantic and Pacific.)	Capitol.	Cook's Finest.
Albany Favorite.	Centennial.	Coral.
American Gilt Edge.	Challenge.	Crystal.
Aunt Sally.	Choice Crystal.	Daisy.
Brooks & McGeorge.	Cook's Acme.	Davis.
Brunswick Yeast Powder.	Cook's Best.	Davis O. K.
Burnett's Perfect.	Cook's Best Friend.	Dixon.
Can't be Beat.	Cook's Choice.	Dooley's.
	Cook's Favorite.	Dry Yeast.

ALUM BAKING-POWDERS—continued.

Eclipse.	Lincoln.	Purity.
Enterprise.	London.	Silver Cream.
Eureka.	Mason's.	Silver King.
Featherweight.	McDowell's G. & J.	Silver Queen.
Fleur de Lis.	Miles' Prize.	Silver Star.
Forest City.	Ne Plus Ultra.	Silver Thimble.
Four Aces.	New Era.	Snowdrift.
Gem.	Ocean Foam.	Springfield.
George Washington.	Ocean Wave.	Somerville.
Globe.	Old Colony.	Sovereign.
Golden Sheaf.	On Top.	Standard.
Grape.	One Spoon.	Star.
Henkel.	Orange.	State.
Higgins.	Our Own.	Superior German.
Holyoke.	Patapsco.	Vienna.
Hygienic.	Perfection.	Welcome.
International.	Pride of Ottawa.	White Star.
James' (London)	Pride of Toronto.	Windsor.
Kenton	Puritan.	

"PACKAGE" COFFEE.

(Chief adulterants found: chicory, peas, beans, rye, corn, wheat, coloring matter.)

American Company's.	"Java Coffee."
Bacon, Stickney & Co.	Medicated.
Blue Seal, Wm. Scull & Co.	National, Davis, Silvers & Co.
Brazil Blended.	Newhall's.
Brooks, Brower & Ware.	None Such.
Chase's.	Old Spanish Hacienda.
Eight O'clock Coffee.	Plantation.
Eureka.	Spurr's Breakfast.
Excelsior.	Sunrise, Weikel Spice Company.
French Breakfast.	U. P. T. Co.
G. A. & P. T. Co.	Vienna Breakfast.

CREAM OF TARTAR.

(Chief adulterants: sulphate of lime, acid phosphate of lime, more than 6 per cent. of tartrate of lime, alum, corn-starch, and flour.)

Allyn, Blanchard & Co., Hartford, Conn.	Malaga, New York.
Bennett & Sloan, New York.	Quinnipiac Mills, Connecticut.
Crescent Mills, Connecticut.	Springfield Coffee and Spice Company.
Hope Mills, Providence, R. I.	Tiger Mills, New York.
Madeira X 1848, New York.	XXX First Quality.

CANNED VEGETABLES.

(The addition of sulphate of copper in small quantities to give a green color seems to be a common practice with these firms.)

Barton Fils, Paris, peas.	Guillaumez, Nancy, peas.
Alex. Bernard, Bordeaux, peas.	Lanan Francois & Cie, Bordeaux, peas.
A. Billet, beans.	Marcelino, Paris, peas.
Charpentier, Usine de Montrouge, peas.	Alphonse Pinard, Bordeaux, peas.
E. M. Dadelzen, Bordeaux, peas.	Eugene du Raix, Bordeaux, peas.
Dandicolle & Gaudin, Bordeaux, peas,	Rödel & Fils Frères, peas.
string beans, sprouts.	F. Rondenot, Nantes, peas.
Duprat, Clement & Maurel, peas.	Soule & Price, Bordeaux, peas.
Alexandre Eyquem, Bordeaux, peas.	G. Talbot, Bordeaux, beans.
J. Fiton Ainé & Cie, Bordeaux, peas.	Victor Tertrais, Nantes, peas.
Fontaine Frères, peas.	Gabriel Triat & Cie, Bordeaux, peas.

LARD.

(Chief adulterants found: water, beef-stearine, cotton-seed oil.)

Armour & Co., Chicago.
 Armour Packing Company, Kansas City.
 J. H. Bruggeman, Cincinnati.
 Cassard & Son.
 Chase & Decker, New York.
 Cobb Bros.
 T. O. Daniels, Chicago.
 N. K. Fairbanks & Co., Chicago.

F. W. Garde & Co., Chicago.
 Halstead & Co.
 Hall & Cameron.
 Hammond & Co., Detroit.
 G. L. Lyons.
 Rohe Bros.
 Wilton, Chicago.
 Chas. F. Tietjen, New York.

OLIVE OIL.

(Chief adulterants found: cotton-seed oil, other vegetable oils.)

Huile d'Olive d'Aix, Berger Frères, Bordeaux.
 Rudolph Chevalier.
 R. L. Dacosini, Nantes, Huile d'Olive Superfine Clarifiée.
 Huile d'Olive Superfine Clarifiée, R. L. Dacosini, Nice.
 Dacosini, Bordeaux.
 Duero & Cie, Aix.
 B. Dufour & Cie, Huile d'Olive Superfine Clarifiée.
 E. Ferrari.

Guillaume, Bordeaux.
 Lazell, Dalley & Co.
 Huile d'Olive Vierge E. Loubon, Nice.
 Mohnoel.
 Orient Frères, Bordeaux, Huile d'Olive Vierge.
 Pure olive oil, prepared by J. L. Pynchon.
 Huile d'Olive Vierge, A. Seguin, Nice.
 L. Verona.
 Huile d'Olive Vierge d'Aix, Bordeaux.
 Superfine Huile d'Olive, Nice.
 Huile de Salade, Providence, R. I.

GROUND SPICES.

(Chief adulterants found: flour, starches of various kinds, turmeric.)

CAYENNE PEPPER.

Casey & Bacon.
 E. R. Durkee.
 Globe Mills.
 New England Coffee and Spice Mills.

I. W. Sprague, Providence, R. I.
 Tropical Mills.
 Union Spice Company, New York.

GINGER.

Casey & Bacon.
 E. W. Ropes, New York.

G. W. Yerks, Albany.

MACE.

Bacon & Stickney, New York.
 Bennett & Sloan, New York.
 Knickerbocker Mills, New York.
 F. H. Leggett, New York.

Springfield Coffee and Spice Company.
 Taylor & Staley, Troy.
 S. R. Van Duzer, New York.

MUSTARD.

J. B. Anthony, Troy.
 Ardenter Mustard.
 Austin & Rich, New York.
 Bacon & Stickney.
 Blackwell & Co., 40 Oxford street.
 Boston Mills.
 Colburn's Mustard.
 Cole and Firth.
 Colman's Mustard.
 Crescent Mills, Connecticut.
 Curlew & Sons.
 Durham Mustard.
 E. R. Durkee's Mustard.
 Empire Mills.
 English Mustard.
 Golding & Co.

Hope Mills, Providence, R. I.
 Imperial.
 India Mills, New York.
 Judson, Parsons & Haskell, Albany.
 Knickerbocker Mills, New York.
 London Mustard.
 London Extra Strong.
 Mather Bros., Albany.
 Matthews, Underhill & Co., New York.
 Quinpiac Mills, Connecticut.
 E. W. Ropes, New York.
 Russian.
 Springfield Coffee and Spice Company.
 Spurr's Mustard.
 Tiger Mills, New York.
 Union Spice Company, New York.

BLACK PEPPER.

Allyn & Blanchard, Hartford.
Casey & Bacon.
Colburn's.
Crescent Mills, Connecticut.
E. R. Durkee, New York.
Globe Mills.
Haskell & Adams.
Lester, Providence, R. I.
New Bedford Mills.

Windsor Mills, New York.
Quinnipiac Mills, Connecticut.
E. W. Ropes, New York.
J. E. Rounds & Co., Providence, R. I.
Sands, Hartford, Conn.
I. W. Sprague, Providence, R. I.
Springfield Coffee and Spice Company.
Union Spice Company, New York.

WHITE PEPPER.

Auger, Tuttle & Co., Connecticut.
E. Howard.
Springfield Coffee and Spice Company.

Union Spice Company, New York.
Wilson, Pratt & Co., New York.

The above lists do not represent the only brands of adulterated foods that are found on the market, but such as the Massachusetts, New Jersey, and Canadian analysts found on analysis to be adulterated within the meaning of their laws.

The copies of foreign laws, decrees, and regulations concerning the repression of adulterations practiced on articles of food are continued from last year's report, and comprise all such as I have been able to obtain, except local police measures.

Respectfully submitted.

Hon. JOHN W. MASON,
Commissioner of Internal Revenue.

EDGAR RICHARDS,
Microscopist.

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REPORT OF THE COMPTROLLER OF THE CURRENCY.

DEPARTMENT OF THE TREASURY,
OFFICE OF COMPTROLLER OF THE CURRENCY,
Washington, D. C., December 2, 1889.

SIR: In compliance with the provisions of section 333 of the Revised Statutes of the United States, I have the honor to submit for the consideration of Congress the twenty-seventh annual report of the Comptroller of the Currency, covering the operations of this Bureau for the year ended October 31, 1889.

During this period a fair degree of prosperity has attended the operations of the associations belonging to the national banking system, and in every department, excepting that of circulation, a gratifying increase in volume of business is exhibited.

The number of banks now in operation is greater than at any former period, and the additions made during the year have exceeded the average of the twenty-seven years since the inauguration of the system.

The withdrawals for purpose of liquidation have not been numerous, and the number becoming insolvent has been conspicuously small. A satisfactory increase is observed in the totals of capital stock, surplus fund, and undivided profits. These three items exhibit the real investments of the shareholders. An increase in deposits is met by a corresponding extension in the line of loans and discounts. The earnings and dividends have been satisfactory to the stockholders when compared with the net returns from money invested in other enterprises.

In a general way it may be said that, considered as banks of discount and deposit, the associations under the supervision of this Bureau have

successfully met the requirements of the several communities in which they are located, and kept pace in growth, strength, and enterprise with the general prosperity which has attended business operations as a whole during the twelve months just closed. No change was made by Congress during its last session in the law regulating the organization of new banks.

Within the year 211 banks have been organized, having an aggregate capital of \$21,240,000. United States interest-bearing bonds amounting to \$4,378,550, were by them deposited with the Treasurer of the United States in trust, to secure the redemption of circulating notes. The number of banks in existence October 31, 1889, was 3,319, having in capital stock \$620,174,365, bonds deposited to secure circulation \$145,668,150, and bank-notes outstanding \$202,023,415, including \$71,816,130 represented by lawful money deposited to redeem circulation still outstanding.

The following table gives the number of banks organized during the year ended October 31, 1889, in each State and Territory, with their aggregate capital, bonds, and circulation:

States and Territories.	No. of banks.	Capital.	Bonds deposited.	Circulation issued.
Texas.....	36	\$3,200,000	\$692,550	\$585,395
Pennsylvania.....	16	1,450,000	326,750	294,075
Nebraska.....	16	1,095,000	268,750	242,055
Washington.....	13	1,360,000	315,000	283,500
Missouri.....	12	3,250,000	287,500	258,750
Kansas.....	10	635,000	158,750	142,875
Kentucky.....	9	1,425,000	281,250	253,125
Colorado.....	7	900,000	187,500	168,750
Iowa.....	7	600,000	150,000	135,000
Illinois.....	6	425,000	106,500	95,850
New Jersey.....	6	450,000	113,000	101,700
Alabama.....	5	375,000	94,500	85,050
Tennessee.....	5	400,000	100,000	90,000
Oregon.....	5	250,000	62,500	56,250
Georgia.....	4	200,000	50,000	45,000
Virginia.....	4	300,000	75,000	67,500
Massachusetts.....	4	300,000	75,000	67,500
Minnesota.....	4	250,000	62,500	56,250
Michigan.....	4	300,000	75,000	67,500
Ohio.....	4	800,000	180,000	117,000
Dakota.....	4	200,000	43,750	39,375
New York.....	3	315,000	79,000	71,100
Wisconsin.....	3	250,000	62,500	56,250
Montana.....	3	225,000	57,500	51,750
Maryland.....	3	225,000	56,250	50,625
Indiana.....	2	150,000	37,500	33,750
California.....	2	325,000	68,750	61,875
Maine.....	2	350,000	62,500	56,250
Louisiana.....	2	260,000	65,000	58,500
New Hampshire.....	2	125,000	31,250	28,125
North Carolina.....	1	150,000	37,500	33,750
Florida.....	1	50,000	12,500	11,250
District of Columbia.....	1	200,000	50,000	45,000
West Virginia.....	1	50,000	15,000	13,500
Connecticut.....	1	50,000	12,500	11,250
Idaho.....	1	50,000	12,500	11,250
Arkansas.....	1	50,000	12,500	11,250
Utah.....	1	250,000	50,000	45,000
	211	21,240,000	4,378,550	3,912,975

* * * * *

CONCLUSION.

* * * * *

On October 31, last, the bonded debt of the United States was \$838,521,712, of which amount \$647,288,850 becomes payable in 1907. During the eighteen years which must expire before these bonds mature, many changes in present conditions are likely to take place which will afford relief to the national banks. The receipts of the Government will no doubt be brought nearer in amount to its necessary expenditures, and the present rapid payment of the public debt arrested. It is even possible that the Government may become a borrower within the period named, for we can hardly expect that it will escape the complications which are incident to national existence even under the most favorable conditions. In any event it is highly probable that some modification will be made as to the rate of interest now paid by the Government upon its bonds so as to bring their par and market value nearer to equality and render it unnecessary for the banks to carry such heavy premium accounts.

It is assumed by the Comptroller that a large majority of the people of the United States are opposed to the substitution of long-date bonds for the existing issues, and that any extension of the time when the interest-bearing debt is to become payable would meet with disfavor. It is practicable, however, to reduce the interest on the debt by a process which would work a saving to the Government and not extend the time when the bonds could be called in for payment.

The present purchases by the Government for the sinking-fund of 4 per cent. bonds net 2.16 per cent. per annum, which represents, substantially, the rate at which the Government can now borrow upon twenty-year bonds. New bonds could be issued in all respects like the 4 per cents now outstanding, except in the rate of interest which could be reduced to $2\frac{1}{2}$ per cent. These new bonds could be exchanged for fours, by paying the holder the present value, at 4 per cent., of the difference in interest between $2\frac{1}{2}$ per cent. and 4 per cent., for the period intervening between the date of exchange and the maturity of the bonds.

This is a plan which has many able advocates and seems to me to be advantageous to both the Government and the bond-holders. It would furnish a basis for national-bank circulation much more acceptable than the present bonds. The Government now realizes but 2.16 per cent. annual interest on bond-purchases, while, under the plan proposed, it would save 4 per cent. upon the prepayments. This subject, however, will undoubtedly be fully discussed in the report of the Secretary of the Treasury, and is noticed here, briefly, only by reason of its connection with national bank-note circulation.

The Comptroller can not close his report without expressing his high appreciation of the integrity, loyalty, and efficiency of the officers and clerks with whom he has been associated in the conduct of the affairs of the Bureau. He desires especially to gratefully acknowledge the valuable services rendered in the compilation of the statistical matter included in this report.

EDWARD S. LACEY,
Comptroller of the Currency.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

REPORT OF THE CHIEF OF THE BUREAU OF ENGRAVING AND PRINTING.

TREASURY DEPARTMENT,
BUREAU OF ENGRAVING AND PRINTING,
October 2, 1889.

SIR: I have the honor to submit the following report on the operations of this Bureau during the fiscal year 1889:

There were completed and delivered during the year 9,201,321 sheets of United States notes, gold and silver certificates, bonds, and national-bank notes, with a face value of \$615,788,850; 28,952,055 sheets of internal-revenue and customs stamps, containing 758,603,390 stamps; of miscellaneous work, such as drafts, checks, certificates, licenses, etc., 1,053,788 sheets, besides a large amount of sundry other work for the various Departments of the Government.

The expenses during the year were:

For salaries of officers and employes other than plate-printers and assistants	\$376,906.85
For plate-printing at piece-rates, including wages of assistants, and for royalty on steam plate-printing presses	389,328.92
For materials and miscellaneous expenses	166,342.01
Total	932,577.78

The appropriations for the support of the Bureau were \$974,450. Of this amount \$41,872.22 remained unexpended and was returned to the Treasury.

The number of persons employed on the first working day of each month during the fiscal year was as follows: July, 916; August, 915; September, 913; October, 911; November, 906; December, 901; January, 913; February, 926; March, 924; April, 925; May, 923; June, 924.

The present Chief of Bureau did not assume the duties of his office until after the close of the fiscal year for which this report is made.

Respectfully yours,

WM. M. MEREDITH,
Chief of Bureau.

Hon. WILLIAM WINDOM,
Secretary of the Treasury:

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REPORT OF THE SECOND COMPTROLLER.

TREASURY DEPARTMENT,
SECOND COMPTROLLER'S OFFICE,
Washington, D. C., September 30, 1889.

SIR: In compliance with your request of August 10, 1889, to report to the Secretary of the Treasury the transactions of this office during the past fiscal year, and the present condition of the public business intrusted to my charge, I have the honor to submit the following summary statement of the work performed in the office of the Second Comptroller for the fiscal year ended June 30, 1889, in tabular form, with a comparative statement showing the work of like character done in the preceding fiscal year:

TOTAL NUMBER OF ACCOUNTS, CLAIMS, AND CASES SETTLED.

From—	1889.		1888.	
	Number.	Amount.	Number.	Amount.
Second Auditor.....	19, 937	\$27, 310, 781	23, 557	\$37, 035, 089
Third Auditor.....	11, 575	115, 549, 928	15, 182	112, 238, 656
Fourth Auditor.....	3, 729	18, 290, 614	3, 032	18, 579, 631
Various sources.....	10, 322	32, 330	9, 696	29, 102
Grand total.....	45, 563	161, 183, 653	51, 467	167, 912, 478

Under section 273 of the Revised Statutes the Second Comptroller examines and finally settles all accounts and claims reported by the Second, Third, and Fourth Auditors of the Treasury.

The actual number of clerks on the rolls of the office during the year was 59.

The work of the office is distributed among seven divisions, known as the Army Back-Pay and Bounty Division, employing 10 clerks; Army Paymasters' Division, 4 clerks; Army Pension Division, 6 clerks, exclusive of one detailed from the Treasurer's office; Quartermasters' Division, 7 clerks; Navy Division, 4 clerks; Indian Division, 5 clerks; Miscellaneous Claims Division, 7 clerks; with a chief in charge of each division. There are, besides, 2 requisition clerks, a register, and a stenographer, and 5 clerks employed on the Soldiers' Home roll, making the total clerical force of the office, including chiefs of divisions, at the present time, 59.

The following is a detailed statement of the accounts and claims revised and settled during the year in each division, with a general statement of their character:

ARMY BACK-PAY AND BOUNTY DIVISION.

Character of the claims.	Number.	Amount allowed.
Soldiers' pay and bounty allowed.....	7, 134	\$873, 487
Soldiers' pay and bounty disallowed.....	8, 409	-----
Total.....	15, 543	873, 487

OFFICE APPROPRIATIONS.

The appropriations for the salaries of the officers and employés for the fiscal year ended June 30, 1889, aggregated \$95,020, of which \$1,051.72 remained unexpended at the close of the year. The appropriations for the same purpose for the present fiscal year (1890) are the same. The estimate of like appropriations for the fiscal year ending June 30, 1891, are \$104,620.

Very respectfully,

B. F. GILKESON,
Comptroller.

Hon. WILLIAM WINDOM,
Secretary of the Treasury.

REPORT

OF

THE SECRETARY OF WAR.

WAR DEPARTMENT,
Washington City, November 23, 1889.

To the PRESIDENT:

I have the honor to submit the annual report of the administration of this Department.

EXPENDITURES, APPROPRIATIONS, ESTIMATES.

The expenditures of appropriations under the direction of the Secretary of War for the fiscal year ending June 30, 1889, were as follows:

Salaries and contingent expenses.....	\$1, 963, 015. 15
Military establishment: Support of the Army and Military Academy.	24, 314, 697. 33
Public works, including river and harbor improvements.....	13, 481, 835. 00
Miscellaneous objects	6, 894, 574. 26
Total.....	46, 654, 121. 74

The appropriations for the current fiscal year ending June 30, 1890, are as follows:

Salaries and contingent expenses.....	\$1, 953, 680. 00
Military establishment: Support of the Army and Military Academy.	24, 352, 220. 46
Public works, including river and harbor improvements	3, 563, 624. 00
Miscellaneous objects	4, 119, 765. 72
Total.....	33, 989, 290. 18

The large difference between the appropriations for the present and the last year is mainly due to the reduction in the appropriation for public works, including river and harbor improvements.

The estimates of this Department for the next fiscal year ending June 30, 1891, are as follows:

Salaries and contingent expenses.....	\$2, 013, 650. 00
Military establishment: Support of the Army and Military Academy.	25, 403, 148. 86
Public works	11, 190, 134. 74
Miscellaneous objects.....	5, 551, 040. 35
Total.....	44, 157, 973. 95

The statement of appropriations, expenditures, and the balances on hand at the end of the fiscal year ending June 30, 1889, is appended to this report and submitted herewith, as required by law.

THE ARMY.

The major-general commanding submits his report of the operations of the Army for the past year, together with the reports of the division and department commanders. These reports are full and important. They show a satisfactory state of drill and discipline, progress in instruction of the troops, and improvement in sanitary arrangements, quarters, water supply, means of recreation, and other matters that concern their personal comfort and welfare. He recommends the reorganization of the artillery, making seven regiments instead of five, and dropping the additional first lieutenants, these extra subaltern officers being, in his judgment, no longer necessary.

I fully concur in his recommendation and deem it very important that authority for these new regiments should be granted. In view of the diminished requirement for the use of the Army against the Indians, it may seem at first that no additional force is required; but even in times of the most perfect apparent security the strength of the Army should bear some proportion to the population of the country.

From our great increase of population, the relative strength of the Army is rapidly diminishing. In 1870, with an enlisted strength of not quite ten thousand larger than now, the ratio of enlisted men to population was one-eleventh of 1 per cent., or one man out of 1,105; in 1880, with the enlisted strength one thousand less than it is now, one-twentieth of 1 per cent. At the present time, with a population of sixty-five millions, it is thirty-nine one-thousandths, or less than one-twenty-fifth of 1 per cent., being one man for every 2,569 of population. The authorized strength of the Army is now 30,000, but only 25,000 is appropriated for. On the full basis of 30,000, its relative strength to population would still be considerably less than in 1880, and one-half what it was in 1870.

The organization of these two regiments is required by the change in situation, as a larger proportion of the force is needed for sea-coast defense, and it should be made, if in no other way, by the reorganization of two regiments from the other arms of the service. But this is not called for, would not be the best policy, and I trust will not be considered. Whether one or both of these new regiments may not be of colored men is worthy of consideration. There are now two regiments of

infantry and two of cavalry of colored men, and their record for good service is excellent. They are neat, orderly, and obedient, are seldom brought before courts-martial, and rarely desert. They would seem to be especially well adapted for service at some of the sea-coast fortifications, and the discipline and instruction received would benefit them and be a public good.

THREE-BATTALION FORMATION.

Nearly every warlike power has adopted the three-battalion formation for infantry. Persia, China, and the United States are almost alone in adhering to the single battalion system. The requirements of our service have been such as to give scant opportunity for the study and trial of new ideas. During our civil war only the present exigency could be considered; at other times our little Army has been scattered in small detachments over our vast domain. The conditions are now changed. The larger part of the Army can soon be at regimental or, at least, battalion posts.

The necessity for this formation in the infantry is even greater than in the cavalry and artillery, where it has long been the rule. The reason for the change, always strong, has now, in view of the greater deployment necessary because of the improvements in small-arms, become imperative. Twelve years ago the report to Congress of officers sent to investigate the armies of Europe and Asia, and to suggest what changes should be made in our Army to modernize and perfect it, strongly urged the adoption of this system. Generals Grant, Sherman, and Sheridan have recommended it, and it is favored by the leading officers in our present service. From a military stand-point the question does not seem to require evidence or argument, but merely examination and action. With this change and the elimination of the extra first lieutenants of artillery, the organization of the three arms of the service will be, as it should be, uniform and upon one harmonious basis.

LINEAL PROMOTION.

The accepted interpretation of the statute with reference to promotions in the Army makes them regimentally up to the rank of captain. The incidents of the service and accidents of life often give rise to rapid advancement in one regiment over others. One reason which is conceived to have led to the adoption of the prevailing rule on this subject when the country was sparsely settled and means of trans-

portation made it extremely difficult and often dangerous to pass from one post to another, no longer exists. General Schofield is of opinion, in which many of the leading officers of the Army agree, that all promotions up to the grade of colonel should be by arm of the service, and that hereafter officers should "be commissioned in the arm of the service to which they belong, and not in particular regiments, so that they may be assigned to regiments and transferred from one regiment to another by the President as the interests of the service may require."

I call attention to these views without recommendation, although they seem to me to have much to commend them. In justice to the present system I would say that General Sherman, when at the head of the Army, was in favor of its continuance, and his views thereon are to be found in House Ex. Doc. 106, Forty-seventh Congress, first session. The adoption of a system of examination for promotion, elsewhere recommended, I think, however, would remove a principal objection to the system proposed.

RETIRED LIST.

Under the acts of Congress approved June 18, 1878, and March 3, 1883, the retired list—other than retirements under the act of June 30, 1882, for forty years' service, and by virtue of the sixty-four years' provision—is limited to four hundred. I invite your attention to the fact that the Adjutant-General reports that there are now forty-eight officers of the Army who have been found incapacitated for active service and recommended for retirement, waiting to be placed upon the retired list, which can not be done, as the list is full. The average number so waiting retirement during the last six years is thirty-seven, and during the past two years it has been increasing. The result is that these incapacitated officers continue to draw full pay while rendering no service whatever for the Government, and "other officers who are doing the duty of these incapacitated officers are kept out of their promotions and out of the pay they should receive for the duties they are discharging." It is a benefit to which the incapacitated officer has no claim, and a great injustice to all officers in active service whose promotion is retarded thereby. Although in some corps the need of officers is pressing, the Department is powerless to fill the places of those thus incapacitated.

The Adjutant-General recommends that all restrictions be removed as to the number of retirements. Such action has before been recommended by the late General Sheridan, as well as by my immediate

predecessor. In view of the fact, however, that the present exigencies of the case can be met by an extension of the limit, and that there is reasonable ground to suppose that it would also provide for the future, I refrain from recommending so radical a change, but do recommend that the limit be extended to four hundred and fifty, or that an act be passed authorizing the special retirement of not to exceed fifty officers.

If it is objected that the list is already large, it should be remembered that the act of July 28, 1866, expressly provided that a large number of the original vacancies in the regular Army should be filled by officers who had been wounded in the volunteer service. Many of these have since been placed on the limited retired list, and, indeed, of the full four hundred, the record shows that three hundred and seventy-five were in the service during the war of the rebellion. Also of the four hundred officers thus retired ninety-one would have been now on the unlimited list by reason of age, leaving only about three hundred justly chargeable to the limited list.

DESERTION.

Public attention has been called to the matter of desertion, and the impression doubtless prevails that it is on the increase. This is not entirely correct. In considering the statistics it must be borne in mind that nearly three-fourths (last year 72 per cent.) of the desertions occur during the first year of enlistment, so that the percentage of desertions to enlistments is the more correct guide than the percentage to the total strength.

Number of enlistments in United States Army, and number of desertions therefrom each year from 1883.

Fiscal year.	Enlistments.	Desertions.	Average enlisted strength of Army.	Per cent. of desertions.	
				To total strength of Army.	To enlistments.
1883	8,998	3,578	23,335	15.3+	39.7+
1884	9,946	3,672	24,268	15.1+	36.9+
1885	8,367	2,927	24,705	11.8+	34.9+
1886	6,941	2,090	23,946	8.3+	30.1+
1887	7,807	2,240	23,482	9.5+	28.6+
1888	7,905	2,436	23,208	10.4+	30.8+
1889	9,599	2,814	24,110	11.6+	29.3+

Tables prepared by the Adjutant-General indicate that the matter of climate, location, etc., has but little determining influence. The percentage of desertions during the last year at ten of the coldest posts was the same as at ten of the warmest. At ten of the healthiest posts in

the Division of the Missouri it was 1 per cent. more than at ten of the unhealthiest. The percentage east of the Mississippi River was 11 per cent.; west of the Mississippi River, but not including the Pacific coast, it was 12 per cent., while on the Pacific coast only 9 per cent. The desertion in the different arms of the service was 13 per cent. of the average number of men in the first eight regiments of cavalry; 12 per cent. in the foot artillery; 27 per cent. in the light batteries, and 12 per cent. in the first twenty-three regiments of infantry. From the two colored regiments of cavalry, and the two colored regiments of infantry, it was only 2 per cent., a fact worthy of particular attention.

The subject has been carefully considered by many officers of the Army, and by enlisted men as well, and I have received many able and interesting reports from both officers and men. The causes assigned are too numerous to recapitulate; restlessness under the restraints of discipline, disappointment at the details of the service, and of its lack of inducements, dissipation, and, in some cases, ill treatment are generally the causes found to exist, while some deserters undoubtedly are professional repeaters and belong to the vicious or criminal classes.

Investigation does not disclose that ill-treatment prevails to any appreciable extent. That it has existed in some degree, and especially at the beginning of the service in recruiting barracks, is a fact; but it has been the exception. Ill-considered and thoughtless treatment is quite as bad. The employment of enlisted men in ordinary labor undoubtedly creates discontent; but the major-general commanding well says in his report, "The Government can not employ hired laborers to do the work which the troops have time to do for themselves." This element of the service can not be wholly removed, but recruits should be made fully acquainted with its existence.

Unnecessary restraint should be removed, and the soldier's life in post be made as comfortable and pleasant as possible. The company is a natural unit of military organization, and in our present service oftentimes the only possible one. "Every captain should be to his company as a father, and should treat it as his family, as his children." A check roll-call has recently been substituted for tattoo, so that men are no longer required to turn out at 9 p. m. in cold or storm. It is believed that the establishment of canteens, which will soon, to a great extent, take the place of the post trader's store, will be salutary.

Since the figures show that it is principally recruits or new men who desert, great care and painstaking is required in the recruiting service itself. It is a question whether the location of recruiting offices in or near large cities secures the best material, and the subject of regimental recruiting has been considered. As an experiment, the Department has authorized the Eleventh Infantry, which now occupies a number of posts in northern New York, to do its own recruiting in the towns and villages within convenient reach of its respective stations. The Department will, as far as possible, assign recruits from one section to the same company or regiment.

With a view to the improvement of the recruiting service, an estimate for an increased appropriation for the next fiscal year has been submitted. If it can be successfully improved thereby, however, many times the amount will be saved. These and kindred questions so far as they lie within the power of the Department under existing laws will receive earnest consideration.

The pith of the whole question is to make the service worth seeking, and then enough good men will seek it and be glad to stay in it. It is an instructive fact that the soldiers in the colored regiments rarely desert, whereas the percentage of desertion in the rest of the Army is so large. Their previous condition in civil life largely explains it. To the colored man the service offers a career; to the white man too often only a refuge. There is now but little incentive for young and intelligent men to make a profession of soldiering. The hope of achieving a commission is but slight. The most deserving are made warrant officers; but even then they receive less compensation than the private soldier who is placed upon extra duty. The distance between the highest grade of non-commissioned officer and the commissioned officer is great, far too great in my judgment. It would be wisdom to decrease that distance.

In so far as the question is an administrative one, the Department must continue to meet it experimentally, correcting abuses where found to exist, and instituting innovations if necessary. It is but just for me to say that the commissioned officers are in earnest in their desire to correct this evil, and are giving to its solution their hearty efforts.

To a considerable extent, however, the remedies lie with Congress, and I submit the following recommendations:

(1) Make the pay of non-commissioned officers, of infantry, cavalry, and artillery, the same as now established by law for like grades in the

Engineers. More bright and ambitious young men might be thus induced to enter the service.

(2) Give the soldier an opportunity to so improve himself that when he leaves the service he may be better fitted for civil life than when he entered it. Post schools should be established where not only instruction by lessons and lectures should be given in matters pertaining to military service, but also in the elementary branches of mathematics, science, mechanics, surveying, engineering, drawing, etc. All officers are qualified to supervise or do this work. It would have no tendency to relax discipline, but would establish a new relation between the company officers, especially the subalterns, and enlisted men, that would be beneficial to both, and help to remedy some of the evils of the present military administration. Something has already been done in this direction, and several schools have been established. Officers who have served on college detail are especially fitted for this work. But an appropriation is necessary for books, apparatus, school-rooms, etc., in order to give opportunities for a fair trial of the plan.

(3) Authorize re-enlistments for one or more years at posts where a soldier is discharged. A man will sometimes re-enlist for a short time when he will not for the full term. If the Government is not subjected to the cost of transportation and instruction, the great objection to short terms of service is removed. Men re-enlisted for a short term would not desert.

(4) Make a code of punishment suited to times of peace, which is less arbitrary but more certain, a subject which I treat elsewhere under the head of military law.

Other points which are strongly recommended by many prominent officers, and have much to commend them, are :

(1) Authorize enlistments for three years only. If a man has not the elements of a soldier, or is himself dissatisfied with the service, it is better to release him within a reasonable time.

(2) For the same reason, give the soldier in time of peace the privilege of purchasing his discharge under well-defined regulations.

(3) Retain some part of the soldier's pay, which he forfeits by desertion, but which otherwise would augment his savings at the time of his discharge.

These suggestions are aimed at removing the causes of desertion, which is the true principle for any legislation ; but with the best laws,

and the best administration, there is a certain class of men who will desert unless restrained by a system of punishment effectively administered.

It is an unfortunate fact that there is at present a tendency in public opinion to at least palliate the offense of desertion, and with the legal difficulties now in the way of securing their capture, the statistics show that only one out of every five deserters is ever arrested and brought to trial. The attention of Congress is therefore invited to the recommendations of the Acting Judge-Advocate-General for permitting and directing the arrest of deserters by civil officers and otherwise rendering their capture more certain and speedy.

SUBSISTENCE.

The Commissary-General reports that the new regulation secures to the soldier the whole ration, or its equivalent in other articles of food, thus removing a hitherto existing cause of complaint. Many leading officers are of the opinion that the ration should be increased by the addition of a certain amount of vegetables. It is a question whether the present fixed diet is sufficiently diversified, and whether it is best to compel the men themselves to provide that variety in diet so important to health.

INSPECTIONS.

The report of the Inspector-General contains much valuable information concerning the condition of the Army and suggestions with reference thereto. It is encouraging to note that he finds the tone and condition of the enlisted men to have steadily improved. I have been pleased to learn from many sources that enlisted men as a class are deserving of much commendation, and that in searching for faults to be remedied we often overlook the general intelligence and devotion which is their characteristic. This fact, however, only enforces upon us our duty to give prompt and careful consideration to suggestions made in their behalf. Sunday inspections of the troops have been, by your order, discontinued and the day made, as far as is possible in a military service, one of rest.

The most perfect military instruction is impossible with our depleted and skeleton organization. It appears, however, that the summer camps of the troops have added much to the efficiency and thoroughness of their instruction in large bodies. The service schools at Forts Riley, Leavenworth, and Monroe are doing excellent work. He suggests that

a battalion of apprentices might be of assistance to the Army as to the Navy. Covering as it naturally does the necessities of the Army in its various phases, many suggestions of his report are necessarily referred to elsewhere under their appropriate heads.

The essential duties of this corps are so intimately blended with the efficiency of the Army and the economy of its administration that its organization should be made as effective as possible. Frequent and rigid inspections by skilled and experienced officers are very necessary to correct abuses and suggest improved methods.

The corps as now permanently constituted consists of only seven officers. In addition to this, the act of June 23, 1874, authorized the Secretary of War to detail not exceeding four officers of the line to act as assistant inspectors-general. This force is inadequate for the best performance of the duties devolving upon it. The number of officers detailed as professors of military science and tactics has been increased. Their work must be inspected and the desirability of some more thorough and general inspection of the militia is worthy of attention. The disbursements of the Department, also, are increasing. I therefore concur in the recommendation of the Inspector-General that his corps be enlarged on a permanent basis, and believe that it should be done even, if needs be, by the reduction of some other corps.

MILITARY ACADEMY.

The Board of Visitors make a number of recommendations, of which such as come within the jurisdiction of the Secretary of War will receive my attention. Their report refers to the disadvantages of having cadets admitted to the Academy in September, and strongly recommends that cadets be admitted at no other than the June examination. The Superintendent of the Academy has also brought this matter to the attention of the War Department through a special report. I am impressed with the correctness of their views, and have already taken such measures as, although not prohibiting such admissions at other times, will, I believe, effectually limit admissions to June only, except in cases where injustice to the candidate would otherwise be done.

The Board call particular attention to the necessity of better quarters and hospital for the enlisted men. The subcommittee state that the present hospital is without modern methods of ventilation, its timbers are in a decaying condition, and the buildings generally damp and unhealthful. Also, that what is said of this building is true of many of the quarters of enlisted men, and they and some of the old store-houses

are "a menace to health, breeding foul gases and germs of typhoid fever and diphtheria." With all that has been done to make this the most beautiful post in the country, I regret that we have so neglected the comfort and health of those stationed there in an humbler capacity, and hope that this subject may receive prompt consideration.

The Board and the Superintendent of the Academy have also made sundry other recommendations, all of which appear more fully by their report. The Military Academy is a peculiarly national institution, and its history is most intimately blended with the greatest achievements of the Nation. The Board of Visitors well say that "it belongs to the people, and it deserves the love, admiration, and confidence of the people." Although generally in most excellent condition, even its simpler wants are deserving of painstaking attention.

An interesting paper by General Lew Wallace accompanies the report of the Board looking to an enlargement of the scope of the Academy's usefulness. While not prepared to make any specific recommendations in the line of the suggestions contained in his paper, it is yet so full of valuable matter that I beg to call attention to it.

I am convinced that the course of instruction is too short unless the standard of admission is raised. All who are acquainted with the Academy agree that, in order to do the necessary work of the course, the cadets are forced beyond a reasonable degree. I should especially deprecate placing the standard of admission above the degree of proficiency for which our public schools qualify. Such a standard would be unjust to poor boys who may be unable to pursue special preparatory courses, and equally unjust to the Academy itself, which finds its best material among them. A preliminary course of a year has been suggested to better prepare cadets for the severe regular course. This, or some plan in the line suggested above, seems to be very much needed.

Negotiations for the Kinsley estate of about 225 acres, adjoining the reservation at West Point on the south, were commenced under a provision in the Army appropriation act of September 22, 1888. The act of March 2, 1889, appropriated \$150,000 for its purchase by the Secretary of War upon certain conditions. These have been complied with, and the purchase completed for the sum of \$149,500, the balance of the appropriation, \$500, being reserved to defray the expenses incident to the purchase, such as examination of title, recording of deeds, etc. This is a very important, and, in fact, necessary addition to that institution, and the price paid is a reasonable one.

Through the patriotic generosity of Mr. George W. Childs, of Pennsylvania, the Academy was enriched, through interesting ceremonies on the 3d of October last, by the presentation of fine oil paintings of the three Generals of the Army, whose names will remain indissolubly connected with the war for the preservation of the Union—Grant, Sherman, and Sheridan.

NATIONAL GUARD.

The discipline and efficiency of the National Guard is universally commended. It was evidenced by their appearance at the Centennial Celebration in New York, April 30 last, and the promptness and celerity with which their concentration was effected. Of their value as a reserve military force, and an essential element in any feasible scheme of coast defenses I treat elsewhere. As an educational institution also it deserves encouragement and support.

The aggregate of this reserve army, regularly organized and uniformed, is 106,500 men, and the present annual appropriation of Congress for their armament and equipment is only \$400,000, or about \$3.75 per man. The first appropriation for this purpose, in 1803, was \$200,000—one-half the amount now available—while in the meantime our population has increased sevenfold. I know of no manner in which a generous appropriation can be more advantageously employed to provide against future military contingencies, and believe that the current appropriation should be increased. The plan of placing a small force of the regular Army with the militia of the different States in their encampments, as suggested from several sources, appears to me an admirable one.

MILITARY INSTRUCTION AT COLLEGES.

Military instruction in colleges bears much the same relation to the military resources of the country as the educational features of the National Guard. Its object is well stated by the Adjutant-General in his report, who says:

The law authorizing the detail of officers of the Army contemplated that their services as professors of military science and tactics would be the means of diffusing, in large educational establishments, instruction in military studies and habits, and make of the institutions selected natural feeders for the militia of the States in which such colleges are located, as the natural aptitude of American youths for military exercises, when supplemented by timely and practical instruction, would undoubtedly lead them later to enroll themselves in their State militia, to the great advantage and increased efficiency of that important branch of national defense.

The data furnished by him are interesting. I believe that the interest in this subject is increasing, and its benefits are becoming more ap-

preciated. There has lately been held in this city a convention of the representatives of colleges having military instruction to consider improvements in that behalf.

April 25, 1889, a board was ordered to consider the practicability of prescribing a uniform system of rules, regulations, and course of study for the guidance of officers detailed as professors of military science and tactics at colleges, and to suggest and formulate such rules, regulations, etc., as would lead to the best results and secure practical uniformity in the amount and character of military instruction at the several institutions of learning having such details.

The matter is now under the consideration of the Department, which will take such measures as it finds most advantageous for the success of this service and for the fullest realization of the advantages possible under it.

The Inspector-General suggests in his report whether, as an encouragement to students so receiving military instruction, it would not be well to give the names of the three best men in each college in the Army Register in connection with the honorably mentioned cadets at West Point.

EXAMINATIONS FOR PROMOTION AND APPOINTMENT.

The subject of examinations for promotion in the Army has repeatedly received the attention of its general officers and of former Secretaries. It has been adopted by all of the leading powers of Europe; is in successful operation in our Navy; and is not untried in the Army itself, where it is authorized in a limited degree in the Engineer, Ordnance, and Medical Corps. We require at the Military Academy most exacting preparation for appointment to the lowest grade in the commissioned service; but once in the service and out of the tactical schools which immediately supplement the Military Academy, there is thenceforth no requirement that an officer shall continue the study of his profession which he is just beginning, and that he must keep abreast with its most modern improvements. An officer is retired for physical disability, but mental disqualification or even notorious inefficiency and incompetency, is now no bar to his rising to the highest grade of field officers. An officer reported deficient at the artillery, cavalry, or infantry school can not thereby be debarred from promotion.

A system of non-competitive examinations with well-defined limitations is founded on good sense and supported by our own experience, as well as that of those countries where the efficiency of a standing army

is held in the highest possible estimation. I would call especial attention to the remarks of my predecessor upon this subject in his report for 1888. The examination should be so broad in its application as to require the officer to show affirmatively that he is qualified for the promotion he seeks. It should not, of course, be a mere book examination, but should give full credit to an officer's record for practical efficiency and usefulness in the service, thus avoiding danger of injustice to those who may have come in from the volunteers or from the ranks.

There can be but few appointments from civil life to the Army, as the laws now stand. If the recommendations either for the re-organization of the artillery or the infantry, or for the relief of the limited retired list, are favorably acted upon, quite a number of second lieutenants will be required, more than the graduating class at West Point and the annual contingent of non-commissioned officers recommended and appointed under the present law will supply.

The greatly increased efficiency of the National Guard and the awakened interest taken in it throughout the country has induced many of our promising young men to join it. To give these young men a chance to gain a commission in the Army would be a proper recognition and encouragement of that organization. Military training is also a feature in many of the colleges and schools, so that there can be no difficulty in securing excellent material if the proper measures are taken to select it.

From these sources I recommend that second lieutenants selected from civil life be appointed upon some proper system of examination.

ORDNANCE.

Under the authority of the act of September 22, 1888, "making appropriations for fortifications and other works of defense, for the armament thereof, for the procurement of heavy ordnance for trial and service, and for other purposes," a contract was entered into with the Bethlehem Iron Works, of South Bethlehem, Pa., amounting to \$1,461,982, for steel forgings for 8-inch, 10-inch, and 12-inch guns, leaving a balance of appropriation of \$38,018 with which to meet any contingencies that might arise, and of which a sufficient sum will remain to procure one additional set of forgings for a 10-inch gun, thus making a total of twenty-three 8-inch, twenty-four 10-inch, and fifteen 12-inch guns.

It is expected that the forgings for the 8-inch guns will have been delivered by July 1, 1891, those for the 10-inch guns by April 1, 1893,

and the 12-inch by December 1, 1893. Contracts have also been awarded for the cast-iron bodies for thirty 12-inch breech-loading mortars, hooped, and for the steel forgings and finishings. Thirteen of these mortars should be completed by March, 1891, twelve more by March, 1892, and the entire number by August 1, 1892. Other work on heavy ordnance is also in progress, and an 8-inch breech-loading rifle, lately completed soon to be mounted for test, the Chief of Ordnance reports, is the first gun of 8-inch caliber that has been made in this country entirely of American steel.

Under the proviso of the act of Congress approved May 1, 1888, the site for the arsenal at Columbia, Tenn., has been formally accepted, and the plans for the principal buildings, roads, etc., have been approved. Contracts also for the work authorized by the acts of September 22 and October 2, 1888, at the Watervliet Arsenal, have been awarded.

The Chief of Ordnance desires, and in my judgment should receive, authority to procure supplies in small amounts by open purchase. The Surgeon-General asks the same. The granting of this authority under proper restrictions to the several bureaus of the Department would be in the interest of economy and prompt service. An amendment of section 3709 Revised Statutes, in the form recommended by the Chief of Ordnance, would effect this purpose.

The inventions which are being made in ordnance, and the consequent change in the methods of warfare, both defensive and offensive, make particularly important the operations of this Bureau.

COAST DEFENSE.

I assume that the exposed condition of our sea-coast requires no proof, nor the necessity of defending it any argument. If there is an apparent sense of security among our people it is born not of ignorance, but of thoughtlessness. Although our position and the traditions of our national diplomacy tend to the maintenance of peace, a defenseless condition will ever invite attack. The actual value of the property thus exposed to a public enemy, although many times the cost of amply protecting it, bears but little proportion to the magnitude of the material interests of the whole nation equally endangered thereby. It is not a local question. Not only is the national honor alike dear to all, but a hostile shell in the streets of New York strikes the prairies as well—their corn and wheat share in the loss. Still the greater burden

will fall upon the States contiguous to the sea-board in the immediate maintenance of the militia required to man the defenses in case of danger.

Celerity promises to be an essential element in any warfare of the future. We have shown our ability to equip and place in the field with rapidity large numbers of men, and could undoubtedly do so again. The defenses and the armament, however, necessary for withstanding the attacks of modern guns, cannot be extemporized. We must substantially have them before the necessity arises. Their creation is not a matter of hours and days, but of months and years. Hence I deem it quite as self-evident that if we are to have such works at all they should be begun earnestly and systematically at once.

I submit as a basis to start from that no time is to be lost in placing the capital of the country, the commercial metropolis on the Atlantic sea-board, and at least one port on the Pacific in the best possible state of defense. How rapidly the work shall be carried on until it embraces every important vulnerable point from the St. John's to the Rio Grande and the ports of the Pacific is the only question. In my view progress can not be too rapid. The Major General Commanding has given in detail the requirements in armament and men for the Atlantic and the Gulf coast, and General Miles has devoted special attention to the defenses of the Pacific and made an excellent report thereon.

Not only does this subject demand attention now, but fortunately our general prosperity points to the present as the auspicious time for pressing the work. I trust, therefore, that Congress will make a liberal appropriation for this purpose. We are making excellent progress with our Navy, but it has no safe base for repairs and supplies or harbor of refuge in case of accident or disaster. It is impossible to overestimate the services it will render in encouraging and protecting our commerce. But however important it may be to carry our flag to foreign ports, to defend it in our own is imperative.

It appears by the report of the Chief of the Bureau of Ordnance that we are now in position to turn out mortars as rapidly as we are likely to be able to mount them. Defensive works begun July 1, 1890, could be armed with 8-inch breech-loading guns the following year; and under the appropriation of September 22, 1888, heavier guns are also in course of construction. There are now on hand two thousand muzzle-loading guns available for sea-coast use, in connection with these long-range breech-loading rifles. None of our present fortifications would be without value, but all could be utilized for accessory defense.

Particular attention is invited to the report of the Chief of Engineers, which impresses upon us the importance of this subject. It presents estimates for the commencement of the earthen mortar and gun batteries required at some of our principal ports, and gives the details of the expenditures of the last appropriation for the purchase of submarine mines, etc., and estimates for its continuation. Our Engineer Corps is well equipped for the important duties which the prosecution of this work would devolve upon them. The necessity at some of the harbors for positions of defense more advanced than the points now held, will require legislation empowering this Department to secure such sites by purchase or condemnation.

Once built, the cost of maintaining a thorough system of defensive works is comparatively small. The Major-General Commanding, in his report, estimates that it will require only 8,700 men for the garrison of defensive works in time of peace. This will be sufficient to care for the armament and serve as a nucleus for the instruction of the militia of the sea-coast States, which must be relied upon to supply the men needed for defense in war, and which he estimates at 87,000.

It is very important that the opportunity for this instruction should be provided at once. They are now being trained and are quite efficient as infantry, light artillery, and cavalry. This has been the best that could be done. But it is not probable that their services will be required in large numbers in either of these arms, for we do not wish to invade any other country, nor is ours likely to be invaded by land. Drilled in handling heavy guns they will supply at a trifling cost the necessary reserve for the small regular contingent maintained in the defenses. Skilled mechanics will seek a militia service, which will give them an opportunity to learn the machinery of modern heavy artillery. It offers to the National Guard of our sea-board States a new and attractive field for drill and study, and it is believed that they will take pride in training themselves to man the defensive works of their own ports, and will embrace the opportunity to do so as soon as it is offered. And there is no service in which men untried in war have won such honors or are so safe a reliance as in the defense of fortifications near their own homes.

RIVER AND HARBOR IMPROVEMENTS.

The works for the improvement of rivers and harbors have been prosecuted during the past fiscal year with funds appropriated by the act of Congress of August 11, 1888, and such balances of former ap-

appropriations as were available. Under section 12 of that act, harbor lines have been established at several ports. The section provided that beyond such established lines "no piers or wharves shall be extended or deposits made except under such regulations as may be prescribed from time to time" by the Secretary of War. As no penalties are prescribed, the Chief of Engineers recommends further legislation in order to make the section fully effective.

Under sections 9 and 10 of the same act twenty-nine persons or corporations owning or controlling bridges over navigable waters of the United States and obstructing the free navigation of such waters have been notified to so alter these bridges as to render passage through or under them "free, easy, and unobstructed." Instead of issuing such notices as heretofore, on *ex parte* hearings only, it has lately been established as the practice of the Department to notify the owners of bridges complained of, and to give them as well as the complainants opportunity to be fully heard if they so desire. Considerable work has been accomplished during the year in the removal of wrecks obstructing navigation.

The Chief of Engineers calls attention to the necessity of further legislation to prevent the obstruction of navigable rivers, and suggests remedies therefor. I would commend the same to the consideration and action of Congress, as well as his recommendation that appropriations for the Yellowstone Park be made without limit of time as in the case of items of the river and harbor acts, in order that the work there might be done at the most favorable season of the year. In compliance with the provisions of the river and harbor acts of 1866 and 1867, the Chief of Engineers presents estimates of the amounts that in his judgment can be profitably expended during the ensuing fiscal year, together with the probable cost of the completion of each work.

SOUTH PASS OF THE MISSISSIPPI RIVER.

During the fiscal year ending June 30, 1889, the channel has been maintained as required by law except from December 28, 1888, to January 4, 1889, both dates inclusive.

Section 5 of the river and harbor act of August 11, 1888, authorizes the Secretary of War to make such rules and regulations as to him shall seem necessary or expedient for the purpose of preventing any obstruction to the channel and injury to the works, and prescribe certain penalties for violations of rules and regulations made by him in pursuance of

that act. Such rules and regulations were made and published in newspapers and widely distributed. Persons have been indicted by the grand jury for violations of these rules and regulations. The attorneys for the defense claim that while Congress had the undoubted authority to establish the rules and regulations the power could not be delegated, and that therefore the rules and regulations established by the Secretary of War are unconstitutional. The decision of the United States circuit court in the matter has not yet been reached. In view of these facts no action has been taken in the more recent violations. It is recommended that an act be passed embodying the rules and regulations published by the Secretary of War; and a draft of a bill covering the case is presented in the report of the Chief of Engineers.

MILITARY LAW.

That administration of justice is most effective which is most certain and well defined, and the less often it is required to be invoked the more its mandates are feared and respected. In time of war, when the slightest infractions of military duty and discipline may be fraught with direst results, punishments are necessarily severe. In time of peace humanity, as well as the very object itself to be accomplished, demands lighter penalties. When we now invite men to become soldiers by profession, it is not enough that the service be made honorable and its inducements fair. They have a right to know that their actions will be judged, their offenses condemned, and their punishments fixed by well-established regulations and laws, rather than by the caprice of men—in conformity with the spirit and the principles of our civil institutions.

At present military punishments are not well defined. Thirty-two of the thirty-four articles of war, under which enlisted men may be tried, authorize punishment at the discretion of the court. There is nothing to prevent the imposition of the lightest penalty for the gravest offense or of the most severe for a trivial one. The variableness of courts martial and the great disparity of punishments prevailing in the different military departments, destroy one of the most essential elements in the proper administration of any code of law, and its fickleness and instability are well calculated to and do invite petitions for clemency.

Neither is punishment certain. The reports show 2,814 cases of desertion during the past year, and there were only 443 convictions for that offense. During the year there were 11,581 cases tried before in-

ferior courts-martial in an army whose effective strength is only 24,110 men. That of itself proves there is a vital defect somewhere. When these judicial proceedings become so commonplace, how can they maintain their force and dignity? The report of the Acting Judge-Advocate-General is a very careful and thoughtful discussion of these and kindred questions, and to his report, and the excellent remarks of the Adjutant-General upon the same topics, I invite attention.

There would seem to be a necessity for a change in the prescribed procedure of military courts touching the duties of Judge Advocates so as to exclude such officers from the deliberation of courts in closed session. While an officer with a due appreciation of the true functions of a Judge Advocate of a general court martial, namely, the ascertainment of truth, would doubtless restrain himself from attempting to influence the minds of its members in a closed session, yet the fact that he, as representative of the prosecution is behind doors closed to the defendant and his counsel, tends to create an impression that such attempts to influence may be made. While it is incumbent upon him to give his views upon any question of law arising in the trial of a case, when requested so to do by the court, such views should be expressed in open court and spread upon the record, so that an accused party may be fully informed as to all matters which may enter into the formation of a judgment in the case.

I recommend the revision of the Articles of War; and that provision be made for the punishment of certain minor offenses, under well defined restrictions, without the intervention of a court-martial, and often times long precedent confinement in a guard-house. For increasing the efficiency of the Judge-Advocate-General's corps I also recommend that an appropriation be made for furnishing necessary law books for its use.

PAYMENT OF TROOPS.

The system of monthly payments to troops has been extended during the year to thirty-one posts, making seventy-four posts where that system is now employed, as against sixty-three where it is not. At present the minimum amount which can be deposited at one time with the Government by a soldier is \$5. In view of the change to more frequent payments, it is recommended by the Paymaster-General that this amount be reduced to \$3. The total amount deposited by soldiers during the past year was a little less than \$400,000.

ARMY POSTS AND SUPPLIES.

The change in character which our military service has been undergoing the past few years, is permitting the gradual concentration of troops in larger posts and more permanent quarters, and Congress has made liberal appropriations to that end. The new post authorized by Congress to be constructed near Atlanta, Ga., has been designated as Fort McPherson, in honor of the memory of General McPherson, who was killed near that city. The post authorized to be constructed near the city of Denver has been designated as Fort Logan, in honor of the memory of the late General Logan. Favorable progress has been made during the year in the construction of buildings at both of these posts.

Work has also been carried on at Fort Riley, Kans., Fort Snelling, Minn., and Fort D. A. Russell, Wyo., and contracts for the buildings and work authorized at Fort Sheridan have been made to the amount of \$295,354. As quarters are completed at the larger stations, the smaller posts will be abandoned, and their reservations restored to the public domain. The new Army Building in the city of New York has been completed and is now occupied.

General Schofield recommends making the post at Plattsburg, N. Y., a regimental one. The citizens of that vicinity have offered to give the necessary land. A similar proposition has been received from citizens of Lexington, Ky., looking to the establishment of a cavalry post at that point.

The Quartermaster-General reports that under the acts of Congress approved July 28, 1888, and March 1, 1889, the gratuitous issue of clothing and equipage to the general commanding the militia of the District of Columbia amounted to \$49,378.11. In view of the limited supply of clothing and equipage in depots, he recommends that an early appropriation be made by Congress to reimburse the Quartermaster's Department to the amount involved.

Attention is invited to the need of appropriation by Congress for the improvement of roads leading to the National Cemeteries at Alexandria, Culpepper, Fredericksburgh and Yorktown, Va. Repairs have already been made at many cemeteries as far as possible, under the act of Congress approved October 22, 1888. The historic character of these cemeteries and their surroundings and the large number of people who are continually visiting them, warrant the small appropriation asked for in that behalf.

An act approved July 23, 1888, appropriated a sum not exceeding

\$200,000 for the purchase of not less than 320 nor more than 640 acres of land within 10 miles of Omaha and the construction of buildings for a ten-company post, provided that not more than one-third of said sum should be expended for the purchase of the site. Proposals for the amount were received and opened in September, 1888. These were referred to the division and department commanders for examination and report, and the purchase of a tract of 540 acres, near Bellevue, about 10 miles south of Omaha, was decided upon. Of this tract 500 acres have been purchased and negotiations are pending for the acquisition of the remainder.

FORT BROWN, TEXAS.

The site of Fort Brown has been used as a military station since 1846; but title to the property has never been acquired by the Government. The question of the purchase of this site has several times been before Congress. The act of March 3, 1875, Statutes at Large, part 3, volume 18, page 391, appropriated the sum of \$25,000 for its purchase, provided a valid title could be secured; but this sum was refused by the owners.

By the act of March 3, 1885, the sum of \$160,000 was appropriated to enable the Secretary of War to purchase the reservation and to extinguish all claims for its occupancy, provided that no part of said sum should be paid until a complete title was obtained. There were disputes among the claimants as to their respective shares of the appropriation in case the purchase was consummated, and on January 25, 1888, the House of Representatives, by resolution, directed the Committee on Military Affairs to investigate and report upon the necessity for continuing the military post at that point, the value of the reservation, including rents for its previous use, and requesting the Secretary of War to withhold payment of any part of the appropriation of \$160,000.

June 9, 1888, the committee reported (H. R. 2543), recommending that the owners be paid the sum of \$50,000 for the land in settlement of all claims for its use and occupation. A bill (H. R. 10452, Fiftieth Congress, second session) in accordance with this, was at the same time reported and recommended for passage, and was referred to the Committee of the Whole, but at so late a period as to preclude its consideration. March 27, 1889, a resolution similar to the one above named was offered in the Senate and referred to the Committee on Military Affairs. The committee made no report upon the subject, as the Senate adjourned six days later.

In this connection attention is called to the report of the Surgeon-General for the past year, by which it appears that Fort Brown is the unhealthiest post in the country; also to the fact that General Sherman in his report for 1882 recommended its abandonment. There is a national cemetery near the fort for which provision will need to be made in case the post should be given up. I have not felt justified in expending any portion of this appropriation of \$160,000 made by the act of March 3, 1885, pending action on the resolution referred to.

HEALTH OF THE ARMY.

The Surgeon-General calls attention to the unsatisfactory condition of the hospital corps, due chiefly to the inadequacy of pay allowed its members, in consequence of which some of the most efficient men decline to re-enlist. Bills providing for an increase of pay for these men were favorably reported by the military committees of both houses of the last Congress, but failed to receive legislative action. The matter is deserving of the early attention of Congress.

The Medical Department is considerably crippled by the fact that twenty-four members of its corps, or 14 per cent. of the present force assignable to professional duty, are non-effective on account of sickness or permanent disability. Nine of these have already been formally found incapacitated, and are awaiting retirement, and others undoubtedly would be if examined by a retiring board. The Surgeon-General reports that fourteen expeditions have been in the field without any medical attendance, and that eleven military stations are without local medical officers; that the important duties of sanitary supervision and of the drill and discipline of the hospital corps are necessarily neglected. The only remedy lies in the retirement of these disabled surgeons, a subject which I have considered elsewhere, or the increase of the corps, which I deem to be unwise.

CHAPLAINS.

Under the law there are thirty-four chaplains—one each for the four colored regiments, and thirty for the army at large. There are at present one hundred and fourteen posts, so that a large number of soldiers are compelled to be without religious instruction. In view of the policy of the Department to concentrate the troops in larger posts, this evil will rapidly diminish. It is to be regretted, however, that of the several duties devolving upon the Government for the education and improvement of its soldiers, this most essential element should be even temporarily neglected.

It would be impossible at this time to say what changes, if any, will be permanently needed. In the present transitory state, therefore, I would only recommend that the Department be empowered to provide for religious instruction at posts where there is no chaplain, by the temporary employment of clergymen, and that an appropriation be made for that purpose.

RECORD AND PENSION DIVISION.

The record evidence required by the Pension Office in the consideration of army pension cases is entirely furnished by this Department. It consists of two classes, the medical record and the service record. The former is taken from the regimental, post, field, and general hospital record books. These were not always well kept, and from twenty-five years' use they had become badly worn, often hardly legible.

The work of answering calls from the Pension Office for information from these records was greatly in arrears until in December, 1886, it was, by my predecessor, put under the charge of Captain Ainsworth, assistant surgeon, and under his energetic business management it was brought up, and the card-index system inaugurated. Every man's complete medical record, no matter in how many hospitals he may have been, is, under this system, transcribed to cards of indestructible paper, and these are arranged by regiments and alphabetically so that the complete medical record can be found at once. This work, now near completion, preserves the record, and the time and labor required to furnish the desired information are reduced to the minimum. The card record of all hospital books—over twenty-two thousand volumes—will be completed early in the new year; and after that the clerks who are now engaged on this work will be employed in transcribing the muster-rolls by a similar method.

The muster-rolls and records from which the evidence of service is obtained were in thirteen divisions and subdivisions of the Adjutant-General's Office. There was too great division of labor and responsibility, and these subdivisions necessarily made work for each other. The number of unfinished cases had been increasing for a long time, and in July last approximated, if not exceeded, 40,000. This was the more unfortunate, as it contributed to the delay incident to the settlement of the claims of old soldiers for their pensions. It seemed advisable, therefore, to make one head for the whole work of this Department in connection with pension claims. I therefore consolidated all the divisions into one, to be known as the Record and Pension Division

of the War Department. The order required that the most direct methods be adopted in the transaction of the public business, avoiding all unnecessary routine. The change was somewhat radical, but the result has been satisfactory.

A new form, prepared by this Department, has been recently adopted by the Pension Bureau, on which the Commissioner now makes the call for both the medical and service record on one sheet, and this is returned with both records on the back, a one-half sheet blank only being used instead of at least four, and often more than that, heretofore. Both records are required in every case, and were called for separately, and separate answers were necessary. With this consolidation and new form, the Pension Office is saved one-half the calls and the work of answering greatly diminished; and both the call and reply, giving medical and service record, are on one sheet in the most convenient form for immediate use or for reference.

This work is now brought up so that, as a rule, all cases from the Pension Office (which average about one thousand per day) for either service or hospital record are finished within twenty-four hours. This result has been accomplished without increase of the clerical force. Great credit is due to Captain Ainsworth, in charge of the division, and to his clerks.

The muster-rolls are in a deplorable condition, dropping to pieces from time and use, and the record evidence they contain, of such great value to the public as well as to individuals, would soon have been hopelessly lost. The completion of the card-index system, however, will be pushed rapidly, and it promises to solve not only the question of the most expeditious and economical use of the rolls but their preservation as well, as they will not then need to be used except in extraordinary cases. I have felt justified in going into the details of this work somewhat on account of its importance and its peculiar interest to the veterans of the war.

REBELLION RECORDS.

The entire publication is to consist of four series, as follows:

Subject.	Series.	Vols.	No. of books.
War operations proper.....	1	49	103
Prisoners of war.....	2	4	4
Reports and correspondence not directly relating to field operations (Union).....	3	2	8
Reports and correspondence not directly relating to field operations (Confederate).....	4	2	4
Total.....		65	119

This publication was commenced about nine years ago, and up to the beginning of the present fiscal year thirty-five books had been published and distributed. The annual appropriation has been \$36,000, and the average cost of each book \$9,300. The act of March 2, 1889, increased the appropriation to \$100,000 for the current fiscal year, and directed that the whole work should be completed in five years. It also provided that the preparation and publication should be conducted, under the Secretary of War, by a Board of three persons, one an officer of the Army, and two civilian experts.

Under this provision I selected Maj. George B. Davis, of the Judge-Advocate-General's Department, who, as chairman of the board, acts as general administrative officer, and appointed as civilian experts Mr. Leslie J. Perry, of Kansas, who is now engaged in the compilation of the second series relating to prisoners of war—himself a prisoner for twenty months—and Mr. Joseph W. Kirkley, of the Adjutant-General's Office, also a veteran soldier, who has charge of the preparation of the rosters, returns, tables, and supervision of the proof-reading, the same branches upon which he has been engaged for several years. The work was left in a good state by Colonel Lazelle, the preparation being well in advance of the publication.

Since July 1, when the appropriation became available, the progress has been as follows:

Campaign.	Vols.	No. of books.	Remarks.
Vicksburg.....	24	3	Published and distributed.
Chancellorsville.....	25	2	Published and distributed.
Port Hudson.....	26	2	In print and will be distributed about December 1.
Gettysburgh.....	27	3	In print and will be distributed about December 1.
Total.....	4	10	

No more can be published during the fiscal year without a further appropriation. Fifty thousand dollars has been asked for in the deficiency estimate. If the means were now available ten more books might be published by July 1, 1890, as follows:

Campaign.	Vols.	No. of books.
Siege of Charleston.....	28	2
Mine Run.....	29	2
Chickamauga.....	30	3
Chattanooga.....	31	3
Total.....	4	10

This will bring the work to the close of the year 1863. To complete it within the five years fixed by the act of March 2, an annual appropriation of \$200,000 will be required. I think it is possible to shorten this time one year. This will be in the interest of economy, and will give the survivors who made the record a year longer to study it. The Board is a capable one, and thoroughly interested and earnest in their work.

MILITARY SIGNALING.

General Greely reports that under the present condition the Signal Corps have retrograded as regards their military duties. The civil duties which have devolved upon the corps under the joint resolution of February 9, 1870, have necessarily occupied the greater part of their time and attention, and as a natural consequence the greater duty trenches more and more upon the lesser, so that now, as he states, the condition of signal instruction in the Army is at the lowest ebb ever known.

He recommends that a signal officer with four or six men be detailed to give instruction at the schools at Forts Leavenworth and Monroe. In short, that the military and civil duties of his corps be separated and a distinct force assigned to each. I fully approve of his recommendation that greater attention should be given to instruction in military signaling, not only to the Army, but to the militia to some extent, and trust that some method may be devised by which this can be done without interfering with the other duties of the corps.

The telegraph lines owned by the United States are managed and operated by this corps. These now consist of 621 miles of sea-coast lines and 1,615 miles of military lines, with sixty-four offices. The military lines have been built where necessary in connection with military operations against the Indians, and to quite an extent by the labor of troops. They are abandoned or sold (unless the material is required for new lines) whenever the construction of commercial lines will permit.

The report gives a full and interesting summary of the weather service and other work of the Bureau for the past year, and makes several suggestions worthy of consideration, notably one for the reorganization and reduction of the corps, and for some method of retiring incompetent officers. The evils arising from putting the competent and deserving officer on the same level with the inefficient, so far as the tenure of service and right to promotion are concerned, is a subject of importance, in its relation to the whole Army, which is considered elsewhere.

APACHE INDIANS.

Geronimo and his band and other Apache Indians, to the number of 387, are held at Mount Vernon Barracks. Of this number, 111 are children under twelve years of age, 93 are males over twelve years of age, and 183 are women. There are also some of their children at the school at Carlisle, where they have made good progress; but the attending surgeon reports that they have suffered much from the severity of the climate as compared with their former home in Arizona.

All reports which I have received state that these Indians appear to be thoroughly subdued, and that in any location east of the Mississippi River there is little or no danger to be apprehended from them. In view of their past career, however, it is necessary that wherever located there should be a sufficient force of troops and strict oversight to remove all fear of trouble. The location of Mount Vernon Barracks is not a favorable one for any measures in the direction of civilization or self-support. There is no opportunity to instruct them in agriculture or other employment.

The Indian Rights Association are deeply interested in the welfare of these Indians, and desire that measures be taken for their practical education and improvement. For this purpose they have offered to purchase lands if the Government will co-operate. I have no doubt, however, that Congress will do whatever justice and humanity requires, rather than allow the burden to fall upon private charity. I have not yet been able to make a personal examination of their present condition or location, nor the other locations which have been proposed for them, but hope to do so at an early day, and will then submit such further suggestions as may be required.

MONUMENTS.

By an act approved March 2, 1889, commissions were designated to select sites and erect pedestals for the statues of the late Generals Sheridan, Logan, and Hancock. The latter commission was completed by your appointment of Senator Francis M. Cockrell, of Missouri. These commissions can not intelligently select a design for and begin the preparations of these pedestals until the designs for the statues themselves are fixed upon.

No selection has yet been made of a site for the Sheridan statue; but the commission has selected Iowa Circle as a site for the Logan statue; and for the Hancock statue the space has been selected at the junction

of Sixteenth and U streets and New Hampshire avenue, to be hereafter known as Hancock Circle, by virtue of an act approved March 2, 1889.

The monument to be erected to the memory of General Lafayette and his compatriots, authorized by an act approved March 3, 1885, will soon be shipped to this country, the contractors, Messrs. Falquire & Mercie, sculptors, of Paris, France, having reported that it will be ready to be put in its place in the city of Washington during the course of the coming winter.

SOLDIERS' HOME.

The Board of Commissioners of the Soldiers' Home have made their report for the year ending September 30, 1889, as required by the act of Congress approved March 3, 1883. The total number on the rolls September 30, 1888, both as regular and temporary beneficiaries, was 1,084; and on September 30, 1889, 1,200, an increase of 116. The average increase for the last six years has been about 100 per year.

In May, 1889, the construction of an additional story upon the center wing of the main building was commenced, the contract for the same being awarded at \$52,409.76. If the present rate of increase in the number of beneficiaries continues, further additions to the capacity of the Home will be required in the near future. The requirement of means for this purpose, and for the maintenance of the Home, is a matter of great concern to the Commission. Its revenues were curtailed by the act of Congress approved February 26, 1889, which limited the adjustment of the accounts in the Treasury Department, from which the greatest amount of revenue for the Home should come, "to those originating subsequent to March 3, 1881."

The expenditure for the simple maintenance of the Home has been \$20,938.93 in excess of its current revenues. Add to this the expense of building improvements during the year, \$65,538.79, and the permanent funds of the Home have been reduced \$86,477.72 during the past year, while it is estimated that under the existing law the additions to the permanent fund will not hereafter be more than \$10,000 or \$12,000 per year. That this condition of affairs, if continued, must ultimately lead to the destruction of the permanent fund of this valuable institution is apparent. Some action should be taken now, and what it shall be, in view of the above facts, demands the early attention of Congress.

ADMINISTRATION.

The details of the bureaus and divisions of the Department and of the several institutions under its control are fully shown by their individual reports. It has been reported to me that some of the bureaus are needing additional clerical force. I am not yet prepared to make a recommendation for any material change until I find it impossible to re-apportion the force of the Department in such manner as to meet these demands.

The increasing complexity and detail of the Department, however, convince me that the creation by Congress of the office of Assistant Secretary of War would be of material assistance in increasing the efficiency and economy of its administration. Several of my predecessors have made the same request, and I beg to renew the recommendation.

REDFIELD PROCTOR,

Secretary of War.

PAPERS

ACCOMPANYING

THE REPORT OF THE SECRETARY OF WAR.

REPORT OF THE MAJOR-GENERAL COMMANDING THE ARMY.

HEADQUARTERS OF THE ARMY,
Washington, October 22, 1889.

SIR: I have the honor to submit the following report of the operations of the Army during the past year, with accompanying reports of the commanding generals of divisions and departments, of the Adjutant General and the Inspector General of the Army, and the commanding officer of the Artillery School and of the Infantry and Cavalry School; also of the Board of Visitors to the latter school:

The organization of geographical divisions and departments remains the same as at the date of the last annual report, except that the States of Wisconsin and Arkansas have been transferred from the Division of the Atlantic to the Departments of Dakota and Missouri, respectively. The following changes in command have taken place since that date: On the 14th of November, 1888, the commanding general of the Army was relieved from the immediate command of the Division of the Atlantic, and Maj. Gen. O. O. Howard was assigned to that command. On the same date Brig. Gen. Nelson A. Miles was assigned to command the Division of the Pacific, relieving General Howard, and Col. B. H. Grierson, Tenth Cavalry, was assigned to the command of the Department of Arizona, vacated by General Miles.

DIVISION OF THE ATLANTIC.

General Howard again calls attention to the important subject of sea-coast defense, and especially to a form of high explosive, with an interesting account of its demonstrated qualities. This is one of the many forms of high explosives which are undergoing exhaustive tests, under direction of the Board of Ordnance and Fortification, for the purpose of ascertaining their utility in the military service.

Special attention is invited to the remarks of General Howard upon the subject of desertions, reorganization, instruction, and other matters of interest to the service, which can not well be abbreviated, as well as to his detailed report of the duties performed by the troops of his command.

DIVISION OF THE MISSOURI.

Major-General Crook, commanding Division of the Missouri, submits the reports of the commanding generals of the four departments comprised in his division. These reports fully set forth the transfer of troops within the division as well as to and from it, except those now in operation, as required by General Orders, No. 69, current series. They also show the instruction of the troops during the past year, which has been quite satisfactory, indicating much improvement. The annual camps of instruction have about been completed; special reports relative thereto will be submitted hereafter.

Attention is specially invited to the remarks of General Crook on the subject of desertion, that of instruction in rifle and carbine firing, and to the report of Col. Robert Williams, assistant adjutant general, of an inspection made by him of the National Park. I fully concur in his suggestions in regard to buildings for the troops, police of the Park, etc.

DEPARTMENT OF TEXAS, BRIGADIER-GENERAL STANLEY COMMANDING.

General Stanley says:

The discipline of the troops in this department is good. The offenses for which officers, non-commissioned officers, and men have been court-martialed are mostly breaches of military discipline, and in civil life would receive no notice. I deny that there is any general spirit of discontent among our enlisted men; that there is any tyranny or unnecessary harshness exercised by officers in dealing with their men. Any fair investigating authority may find that these are facts any day.

Attention is invited to his remarks upon the subject of the subsistence ration, and to his report upon the operations of the troops under his command. Orders have heretofore been issued for the increase, by one regiment of infantry, of the force in that department.

I approve the following recommendations of the department commander:

I respectfully recommend a survey of the entire State of Texas, with the view of locating and classifying all the country roads. This is so much more necessary under the changes made in regard to roads by recent legislation on roads and fences. Without a guide troops can not now march from one county seat to another, fences and gates interfering every few miles. This work recommended could be done without incurring any great expense.

Long residence in parts of Texas, notably the Rio Grande border, is debilitating, and I recommend that troops be changed on this border at least once in four years.

An appropriation for the purchase of the old reservation of Fort Duncan and the restoration of that post is earnestly recommended.

Questions are constantly coming up requiring a legal opinion on points of law which require a search into authorities that can only now be consulted through the courtesy of private parties. This places the law officer of the department to great inconvenience and loss of time, and in the attitude of a borrower of implements to carry on the legitimate work of the Government for which he has been detailed.

It is earnestly recommended that an appropriation be made to supply the acting judge-advocate's office of this department with a good working law library and current law publications.

DEPARTMENT OF DAKOTA, BRIGADIER-GENERAL RUGER COMMANDING.

The State of Wisconsin was transferred to the Department of Dakota by General Orders No. 36, April 6, 1889, from the headquarters of the Army.

Fewer occasions than in former years have required action by the

troops for repression of Indian troubles. The nature of the demand in each case calling for action, and the service done by the troops, are stated or indicated in the summary of events.

There has been improvement in the general state in the department with respect to discipline, including instruction, and in the welfare of the troops, due in part to the effect of recent orders concerning instruction in the Army, and to the better provisions in the past few years by the supply departments for the comfort of the soldiers, and to improvements at most posts likely to be required for some years, in the barracks, the water supplies, the sanitary conditions, and in means for recreation.

Instruction in field operations has been in progress for the several garrisons at all posts in the department, conformably to the requirements of General Orders No 105, of 1888, from the headquarters of the Army, reports of which will be submitted in due time.

DEPARTMENT OF THE MISSOURI, BRIGADIER-GENERAL MERRITT
COMMANDING.

In the Department of the Missouri an important and exceedingly delicate duty has devolved on the troops in connection with the settlement of the new Territory of Oklahoma. The conduct of the troops in the discharge of this duty has been worthy of praise, while the ready submission of the people to the unwounded military restraint rendered necessary by the temporary absence of civil authority attests their high character as good citizens.

Early organization of civil government in that Territory will, it is hoped, relieve the Army from that exceptional duty. Special attention is invited to the very interesting report of General Merritt on this subject, as well as to the detailed report of the operations of troops under his command.

DEPARTMENT OF THE PLATTE, BRIGADIER-GENERAL BROOKE COM-
MANDING.

Since date of the last report there has been no disturbance on the part of Indians in this department.

The transfer of the quartermaster's and subsistence depots from Cheyenne to Omaha has been authorized. The subsistence depot at Cheyenne has been closed, and all the business of the depot is now transacted at Omaha, with advantage to the service.

The closing of the quartermaster's depot is in progress and, it is anticipated, will be completed at an early date.

The transfer of the ordnance depot has been recommended, and provision is now being made for its accommodation on the grounds of the quartermaster's depot at Omaha. As soon as the buildings authorized are completed, it is anticipated that the transfer will be duly made.

The instruction of the troops in the four camps of last year was made the subject of a special report at the close of the season. It was found to be highly beneficial, and resulted in the authorization of a larger encampment on the Fort Robinson (Nebraska) Reservation, with every prospect of success in the instruction of officers and enlisted men in the various duties of the field. A report of the result will be made soon after the return of the troops to their stations. At this time much progress has been made in the course of instruction, and the good

results, from an extension of the practice of assembling troops in large bodies, are apparent from every point of view.

Under the new system of target practice the scores made have not been so high as in previous years, but the system is manifestly an improvement, and the instruction under it is more beneficial to the Army generally than under the former system.

DIVISION OF THE PACIFIC, BRIGADIER-GENERAL MILES COMMANDING.

The reports of the division and department commanders (Brigadier-General Gibbon, commanding the Department of the Columbia, and Colonel Grierson that of Arizona) give very complete accounts of the operations of the troops, including field maneuvers, camps of instruction, and target practice. They also contain valuable suggestions upon the subjects of desertion, army organization, promotions, etc., in respect to the defenses of the Pacific Coast and relative to the Indian tribes in Arizona and New Mexico. I will not attempt to condense these reports, but invite attention to them, with the suggestion that a copy of Colonel Grierson's report and recommendation relative to the Indians within the limit of his department be referred to the honorable Secretary of the Interior.

The department commander forwards a report, embracing details relative to Indians and military affairs, from Col. E. A. Carr, Sixth Cavalry, commanding the District of New Mexico.

REMARKS.

The somewhat diminished necessities of the Western service have made it practicable to station a small part of the infantry of the Army at some of the most important strategic points in the Eastern States. One of these points is obviously Plattsburg, N. Y., where sufficient ground has been reserved for military uses from the earliest period in the country's history, and where one company of infantry is now stationed. Hence I have suggested the construction of barracks and quarters for a regiment at that point.

Other stations in the interior, which have heretofore been occupied by artillery, have now been garrisoned by infantry, and the artillery troops sent to sea-coast stations, where they may be instructed in their appropriate duties.

There has been little need in the past year for the service of the Army, either in aid of the civil authorities or in controlling the Indian tribes. The simple presence or proximity of the troops has given sufficient moral support to the civil officers having charge of the Indians, and to those appointed to regulate the settlement and organization of government in the Territories newly opened to settlement.

All the troops not otherwise employed have been actively engaged in practice marches, camps of instruction, target practice, instruction in sea-coast artillery, etc., to the end that each arm of the service may be kept at the highest state of efficiency and preparation for any service which may at any time be required.

Regular attendance and instruction in the post schools provided by law has been made a military duty, to insure the elementary education of the young men who may be deficient, when enlisted, in such education. This will, it is believed, assist in elevating the character of the enlisted men, make them more efficient soldiers, and better prepare them for civil life when discharged from the Army.

ADJUTANT-GENERAL'S DEPARTMENT.

The report of the Adjutant-General of the Army gives complete information, in tabular form, relative to the organization, actual strength, and distribution of the Army and other details. It also contains the statistics of desertion, arranged with care, so as to exhibit the relation of desertion to the various conditions of service which have been supposed to affect it. This information, so arranged, is of great service in an intelligent study of the subject. The Adjutant-General and the officers of his department have given much careful consideration to this important subject, and their views are entitled to great weight.

I also invite special attention to the recommendations of the Adjutant-General relative to the other matters treated of in his report.

INSPECTOR-GENERAL'S REPORT.

The report of the Inspector-General of the Army has not reached me at this date. It will be submitted as soon as it is received.

EXAMINATIONS FOR PROMOTION.

It seems manifest that promotion in the active service, no less than original appointment, should be based upon competency to discharge the duties of the office. The former Regulations of the Army provided that regular promotion should be made according to seniority, "except in case of disability or other incompetency." In my last annual report I ventured to suggest that this regulation provided a sufficient means of preventing the promotion of incompetent officers, and recommended the action which seemed to me necessary to make that regulation effective. Since that time, in the revision of the Regulations, the words "or other incompetency" have been stricken out. Nevertheless, I venture respectfully to renew the recommendation then made, "that hereafter no officer of infantry, cavalry, or artillery who has been officially reported by his commanding officer for 'disability or other incompetency' shall be promoted to a higher grade until he shall have passed a satisfactory examination, to be prescribed by the War Department."

Competency on the part of officers of the line is the general and well-known fact. Incompetency, like physical disability, is the exception, and its examples are equally well-known to commanding officers. It would be an unnecessary burden upon the War Department, and an unnecessary expense, to subject all line officers to examination for promotion. It would, in my judgment, be sufficient to examine those who are reported incompetent, as is done in the cases of those who are reported physically disabled. The practical application of such a regulation would doubtless give such *stimulus* to the exertions of young officers to qualify themselves for their duties that very few examinations would be necessary.

DESERTION.

The causes of discontent which lead to desertion from the Army are numerous. They have been sought for diligently in past years, and many of them have been removed. Some of them are probably beyond the reach of any remedy. One of these is the naturally discontented disposition of the men who are led by that feeling alone to seek change from the monotony of bread-winning, in any civil pursuit, by entering the supposed less arduous service of the United States. When such

men find that soldiers, no less than civilians, must work, their feeling of discontent returns, and they resort to the only means by which they can make another change. These men rarely desert when engaged in an active campaign, however great the hardships and privation or severe the discipline may be. It is the ordinary labor and routine of military duties which inspire them with discontent. These causes of desertion can not be removed. The troops can not be kept constantly in active military campaign, nor can they be exempted from the monotony of routine duties and labor. The Government can not employ hired laborers to do the work which the troops have time to do for themselves. In time of war men may be enlisted for the sole purpose of campaigning and fighting; but in the permanent establishment the only useful men are those who are content to fight or to work, as circumstances may require. A body of such men can be obtained only by some such eliminating process as that of which desertion is now the most conspicuous and lamentable feature. It would seem that some kind of probationary system might be devised by which the unfit element among recruits could be eliminated without resort to the crime of desertion. It does not seem necessary that men be required, in time of peace, to bind themselves absolutely to serve for five years. In time of war such an obligation is, of course, indispensable, and any reason for waiving it does not then exist. A sufficient remedy may perhaps be found in the case of all worthy men who find, after a few months' trial, that they have mistaken their calling, by a more liberal exercise of the power to discharge soldiers upon their own application than has ever heretofore prevailed. If such discharges are given before the recruit is sent to his regiment the expense to the United States will not be great; far less than the losses now sustained by desertion.

Greater care in the recruiting service, to prevent the enlistment of men of bad character or habits, may be found practicable. Measures having this object in view have already been instituted. Also greater care in the treatment of recruits by officers and non-commissioned officers. Few men, unfortunately, possess the temper which is desirable in a commanding officer whereby strict discipline may be enforced without giving offense to subordinates. The records of desertion from different organizations throughout the Army leave no room for doubt of the fact that the character of the commanding officer has much to do with the extent of this evil. It is true that lax discipline, coupled with great care for the comfort of the men, may give a captain a very contented company yet a very inefficient one, while very rigid discipline may cause half the men to desert, but make the other half extremely efficient soldiers. Only a few officers, perhaps, are able to strike the happy mean by which contentment and effective discipline may be combined; but this is what all commanding officers should strive to reach.

In some few instances it appears that captains are in the habit of leaving the care and discipline of their men to the first sergeant and other non-commissioned officers, without that constant supervision and control which the captain should exercise. In all such cases the captain should be promptly removed from the command which he so seriously neglects. Personal care of his men, in all that concerns their rights and well-being, as well as in that which concerns the discipline and instruction, is the first duty of a company commander.

After all possible has been done to remove reasonable excuses for desertion, it still remains true that the means now provided for the arrest and punishment of deserters are wholly inadequate. Only one in five is ever captured. This is not sufficient to deter men from com-

mitting crime. The remedy is to authorize civil officers to arrest deserters, and increase the reward so as to compensate them for their service. There is no need to increase the penalty for desertion, but to make some penalty at least probable, which it is not now.

ARMY ORGANIZATION AND PROMOTION.

It is very important that the organization and rules regulating promotion, as well as rates of pay for equal grades, with increase for length of service, should be the same as far as practicable throughout the Army. This principle was recognized by Congress in the law fixing the pay of the Army in 1870, but the obsolete organization still continues in the infantry and artillery, and the unjust rule of promotion up to the grade of captain in infantry, cavalry, and artillery.

Proper organization is essential to the efficiency of the Army. Impartial justice to officers and soldiers is indispensable to their general contentment and zeal in the public service.

The present organization of the cavalry accords with the necessities of modern tactics and requires no change; that of the infantry is seriously defective, inasmuch as it supposes a single battalion of ten companies, an impossible formation under the fire of modern weapons. A regiment of infantry should consist of three battalions, aggregating twelve companies, as in the cavalry.

The present organization of the artillery is defective in that the number of subaltern officers is much greater than necessary. It was based upon the supposed necessity of the field or light battery service. But this necessity no longer exists, even in the field artillery, and never has existed in sea-coast artillery, which comprises at least four-fifths of the artillery arm. This excess of lieutenants causes the ruinous stagnation in promotion of artillery officers, whereby the age of most active and efficient service is passed before an officer attains to the rank necessary to the command of a battery.

The present necessity for some increase in the sea-coast artillery affords a most favorable opportunity to correct this fault in the artillery organization. It is now practicable to obtain the necessary increase of effective strength without any material increase in the whole number of officers by a judicious use of the surplus officers of the present organization. For this purpose I respectfully suggest that the present five regiments of artillery be organized into seven regiments, the organization to be the same as that now provided by law, except that there shall be only one first lieutenant, instead of two, to each battery.

I respectfully recommend that the enlisted strength of the army be increased to 30,000. There should be a large margin for recruits under instruction at depots, who should not be sent to distant stations, at great expense, until they have become well accustomed to military life and their continuance and efficiency in the service well assured. Under a limit of 30,000 about 25,000 men in the ranks could always be relied on.

The addition of 5,000 men, as suggested, would supply the force necessary for the proposed reorganization of the infantry and artillery.

The present system of promotion in the line of the Army results in very great injustice to many officers. In fact, one-half of these officers suffer injury, without cause, for the benefit of the other half. In some cases this injury is extreme, one officer being deprived of his promotion to the grade of captain until he has served eighteen, twenty, or even twenty-two years as a lieutenant, while another in the same arm of the

service receives his captaincy in eleven or twelve years, without having rendered any special service to merit exceptional promotion. Moreover, this evil has been greatly aggravated in past years by the selection of such officers for retirement, on account of disability, as would make place for the promotion of juniors over the heads of their seniors. So far has this been carried that some officers have been deprived of the possibility of the regular promotion to the higher grades in the arm of the service, which is apparently guaranteed to them by the plain language of the law.

It may be impracticable to remedy the wrongs which have already been done; but like wrongs may be prevented, by appropriate legislation, in the cases of all young officers who have not yet begun to suffer them.

I would respectfully suggest that hereafter promotions, from the grade of second lieutenant up to that of colonel, in the cases of all officers who are not now above the lowest grade, should be made according to seniority of commission in the arm to which the officer belongs, and not, as now in part, by regiments. I would also suggest that hereafter officers be commissioned in the arm of the service to which they belong, and not in particular regiments, so that they may be assigned to regiments and transferred from one regiment to another by the President, as the interests of the service may require.

NON-COMMISSIONED OFFICERS.

The efficiency of the Army, and the welfare and contentment of the enlisted men, depend very largely upon the non-commissioned officers. Hence it is very important that the character and dignity of the latter be elevated as much as possible. The vacancies available for the promotion of enlisted men to the grade of second lieutenant are necessarily very few in number, and the most meritorious non-commissioned officers are too old to commence a career as commissioned officers. Hence each non-commissioned grade should be made a real reward for meritorious service. I respectfully recommend that the pay of non-commissioned officers of infantry, cavalry, and artillery be made the same as that now established by law for like grades in the engineers.

TARGET PRACTICE.

The new Firing Regulations for Small-Arms, prepared by Capt. S. E. Blunt, Ordnance Department, late inspector of small-arms practice at the Headquarters of the Army, were published with the approval of the War Department at the beginning of the present year. It is believed that they embody the results of the valuable experience of the last ten years in this most important branch of the soldier's instruction and will require no substantial modification for several years to come.

As indicated in my last annual report, special attention is required, under the new Regulations, to pistol practice in the training of the cavalry soldier; and separate competitions have been inaugurated for the cavalry, in which the pistol and carbine are used instead of the rifle.

The results of the various competitions and the departmental reports indicate that instruction in the use of the rifle, the pistol, and carbine have been conducted with undiminished energy and enthusiasm, and with very favorable results. A special improvement in skirmish firing is noted; due to an increase in the time required to be devoted to this

vitaly important variety of practice. It is believed that to obtain the most gratifying results nothing will be required for several years to come, except conscientiously carrying out the firing regulations as they now stand.

It is regretted that the new medals to be awarded to successful competitors could not be distributed at the proper time, owing to the press of work which has as yet prevented the authorities of the mint from completing the necessary dies.

In connection with the subject of small-arms practice, I desire to repeat my suggestion of last year, that the time seems to have come to replace our single-loading small-arms by magazine arms of reduced caliber.

The evolution of a system of target practice for field and garrison artillery, similar in excellence to that now followed by the other arms of the service, is greatly to be desired. For the field artillery much is to be hoped, in this direction, from the establishment of the school of instruction at Fort Riley. This will subserve its most important purpose if it develops into a scientific school of gunnery for that arm, for which object every encouragement should be given.

The problem is at present a more difficult one in the case of garrison artillery, owing to the antiquated character and great variety of our sea-coast armament. Nevertheless, much instruction is to be derived from an intelligent use of the material now on hand. An important step has been taken in making the method identical, as far as local conditions will permit, for all of our sea-coast garrisons. This will permit a system of comparison between regiments, garrisons, and batteries essential to an enthusiastic prosecution of such work.

The heavy artillery service has been much hampered by the lack of all scientific appliances for conducting practice with its special arms; but it is hoped that this will be remedied by a judicious expenditure of the appropriation made by the last Congress to provide the necessary apparatus. With this object in view, a provisional expenditure of a portion of the appropriation has been directed for the posts of Fort Warren, Fort Hamilton, Fort Wadsworth, and the Presidio of San Francisco. After a thorough test of the appliances deemed necessary has been thus obtained, the remainder of the appropriation can be expended to the greatest advantage.

The measures now in progress, under recent acts of Congress, will soon give the artillery an opportunity to practice with the best sea-coast ordnance.

THE NATIONAL GUARD.

The celebration of the centennial of the inauguration of President Washington in the city of New York on the 30th of April, gave occasion for the assembly of a large body of troops from many of the States, together with a small contingent from the Regular Army. This afforded a favorable opportunity for testing the discipline and efficiency of the troops thus assembled, as well as the capacity of the railroads for the rapid transportation of large bodies of men. The results of this experiment were highly satisfactory. The execution of the complicated and difficult operations required of these troops was practically faultless, and fully justifies the confidence that they could be concentrated at any point and made an effective army in an exceedingly short time. It may safely be said that at no previous period have the volunteer militia of the country, when yet untried in battle, been in so high a state of preparation for active service.

Good results are already apparent from the policy adopted by Congress of fostering military education in many of the colleges and public schools of the country. It is believed that officers of the Army can not, in time of peace, be more profitably employed than in this general education of the youth of the country. If there were no other benefit, the discipline, including prompt and exact obedience, which is a necessary part of military instruction, is beneficial in all civil avocations hardly less than in the military service, and is an essential part of the education of a good citizen.

Upon the invitation of the governors of several of the States, detachments of the regular troops have united with the State troops in their annual encampments for instruction. This experience has, it is believed, been mutually beneficial, and there is no duty which the regular troops perform with more alacrity and satisfaction. They are glad to render any aid in their power to the volunteers, whose service is performed at so great personal sacrifice, and upon whom they rely for support as an immediate reserve in time of need.

ORDNANCE AND FORTIFICATION.

The reports of the Board of Ordnance and Fortification, from time to time, have given in detail all the business transacted by the board since its organization. The board has steadily pursued the policy dictated by the act of Congress approved September 22, 1888, to ascertain by public competition and practical tests the best of all varieties of heavy ordnance and other implements and engines of war which the genius of the country may produce.

The plans of the Engineer Department will provide all the land defenses necessary for the security of the great maritime ports of the country. In a very few cases these land defenses will need to be supplemented by floating batteries or powerful harbor-defense vessels, because the necessary foundations for guns do not exist on solid ground.

Submarine mines and movable torpedoes will also play an important, though secondary, part in the general plans of defense.

All these conditions of defense have been fully considered by the military engineers of this and other countries, and the problem is entirely capable of satisfactory solution. The great sea-board cities of the country can, at a moderate cost, be placed in condition of permanent security against any possible foreign attack, while the Navy, which is now so rapidly approaching the condition demanded by public interests and the national honor, may be left entirely free to protect the interests of the United States on all the seas of the world, and to pursue and attack upon the open ocean any hostile fleet which may venture near our shores.

The report of the Chief of Engineers will indicate the appropriations which may be judiciously made at the next session of Congress to provide emplacements for the guns and mortars whose efficiency will have been satisfactorily tested under direction of the Board.

It is not suggested that any additions be made to the old fortifications or armament of the military posts along the northern border of the United States, but that a moderate force be maintained in barracks at those posts.

The estimates of the Chief of Ordnance will indicate the sums which may be judiciously expended in the manufacture of heavy ordnance of those kinds whose merits have been satisfactorily demonstrated.

The Board of Ordnance and Fortification will submit an estimate of

the additional funds which seem desirable in the prosecution of the special work intrusted to that Board by act of Congress. In this connection I beg leave to most respectfully suggest that there is no need of a provision that ordinary expenditures in the Engineer and Ordnance Departments shall be made under the direction of the Board of Ordnance and Fortification, such as was introduced, perhaps inadvertently, in the last appropriation bill.

SEA-COAST GARRISONS.

In immediate connection with the resumption of work upon the fortifications and armament of the principal sea-ports provision should be made for the necessary garrisons and for their barracks and quarters. The permanent artillery force should be sufficient for the ordinary care of the guns, machinery, and defensive works, and to furnish the trained experts necessary for the working of the guns in time of war. It should also be sufficient to serve as the nucleus for instruction, in time of peace, of the militia of the sea-coast States, who must be relied upon to supply the great mass of men which will be needed for defense in war.

The following detailed statement, based on the estimate made by the Board on Fortifications, in 1886, of the necessary armament, shows that the war garrisons of our sea-coast defenses must be about 85,000 artillery-men:

Ports to be defended.	Proposed armament.			Gun detachments.		× 3 for one day's action.	
	Caliber.	Kind.	Number.	Men.		Men.	Total.
				One gun.	Total.		
New York, N. Y.	16-inch..	110-ton guns ..	18	18	288	864	
	14-inch..	80-ton guns ..	2	16	32	96	
	12-inch..	50-ton guns ..	40	12	480	1,440	
	10-inch..	27-ton guns ..	20	8	160	480	
	8-inch..	13-ton guns ..	15	8	120	360	
	12-inch..	Mortars ..	144	8	1,152	3,456	
Total.....			239	70	2,232	6,696	6,696
San Francisco, Cal	16-inch..	110-ton guns ..	10	18	180	540	
	14-inch..	80-ton guns ..	4	16	72	216	
	12-inch..	50-ton guns ..	20	12	240	720	
	10-inch..	27-ton guns ..	71	8	568	1,704	
	8-inch..	13-ton guns ..	5	8	40	120	
	12-inch..	Mortars ..	128	8	1,024	3,072	
Total.....			238	70	2,124	6,372	6,372
Boston, Mass	16-inch..	110-ton guns ..	8	18	144	432	
	12-inch..	50-ton guns ..	10	12	120	360	
	10-inch..	27-ton guns ..	15	8	120	360	
	8-inch..	13-ton guns ..	10	8	80	240	
	12-inch..	Mortars ..	132	8	1,056	3,168	
Total.....			175	54	1,520	4,560	4,560
Lake ports:							
Fort Wayne.....	10-inch..	27-ton guns ..	3	8	24	72	
	8-inch..	13-ton guns ..	3	8	24	72	
	6-inch..	5-ton guns ..	4	6	24	72	
	10-inch..	Mortars ..	8	6	48	144	
Total			18	28	120	360	360

Ports to be defended.	Proposed armament.			Gun detachments.		× 3 for one day's action.	
	Caliber.	Kind.	Number.	Men.		Men.	Total.
				One gun.	Total.		
Lake ports—Continued.							
Proposed fort on St. Lawrence	12-inch..	50-ton guns ..	2	12	24	72	
	10-inch..	27-ton guns ..	6	8	48	144	
	10-inch..	Mortars	8	6	48	144	
Total.....			16	26	120	360	360
Fort Montgomery, Rouse's Point...	8-inch..	13-ton guns ..	4	8	32	96	
	10-inch..	Mortars	8	6	48	144	
Total.....			12	14	80	240	240
Hampton Roads, Va.	16-inch..	110-ton guns ..	4	18	72	216	
	12-inch..	50-ton guns ..	10	12	120	360	
	10-inch..	27-ton guns ..	20	8	160	480	
	12-inch..	Mortars	16	8	128	384	
Total.....			50	46	480	1,440	1,440
New Orleans, La.	12-inch..	50-ton guns ..	20	12	240	720	
	8-inch..	13-ton guns ..	10	8	80	240	
Total.....			30	20	320	960	960
Philadelphia, Pa.	12-inch..	50-ton guns ..	10	12	120	360	
	10-inch..	27-ton guns ..	5	8	40	120	
	8-inch..	13-ton guns ..	5	8	40	120	
	12-inch..	Mortars	16	8	128	384	
Total.....			36	36	328	984	984
Washington, D. C.	12-inch..	50-ton guns ..	7	12	84	252	
	10-inch..	27-ton guns ..	6	8	48	144	
Total.....			13	20	132	396	396
Baltimore, Md.	12-inch..	50-ton guns ..	5	12	60	180	
	10-inch..	27-ton guns ..	5	8	40	120	
	8-inch..	13-ton guns ..	5	8	40	120	
	12-inch..	Mortars	16	8	128	384	
Total.....			31	36	268	804	804
Portland, Me.	12-inch..	50-ton guns ..	20	12	240	720	
	10-inch..	27-ton guns ..	10	8	80	240	
	8-inch..	13-ton guns ..	10	8	80	240	
	12-inch..	Mortars	48	8	384	1,152	
Total.....			88	36	784	2,352	2,352
Rhode Island ports	16-inch..	110-ton guns ..	2	18	36	108	
	12-inch..	50-ton guns ..	10	12	120	360	
	10-inch..	27-ton guns ..	10	8	80	240	
	12-inch..	Mortars	48	8	384	1,152	
Total.....			70	46	620	1,860	1,860
Key West, Fla.	16-inch..	110-ton guns ..	2	18	36	108	
	12-inch..	50-ton guns ..	10	12	120	360	
	12-inch..	Mortars	32	8	256	768	
Total.....			44	38	412	1,236	1,236
Charleston, S. C.	12-inch..	50-ton guns ..	8	12	96	288	
	10-inch..	27-ton guns ..	4	8	32	96	
	12-inch..	Mortars	16	8	128	384	
Total.....			28	28	256	768	768
Mobile, Ala.	12-inch..	50-ton guns ..	12	12	144	432	
	8-inch..	27-ton guns ..	10	8	80	240	
	12-inch..	Mortars	16	8	128	384	
Total.....			38	28	352	1,056	1,056

Ports to be defended.	Proposed armament.			Gun detachments.		× 3 for one day's action.	
	Caliber.	Kind.	Number.	Men.		Men.	Total.
				One gun.	Total.		
New London, Conn.....	12-inch..	50-ton guns..	4	12	48	144	
	10-inch..	27-ton guns..	4	8	32	96	
Total.....			8	20	80	240	240
Savannah, Ga.....	12-inch..	50-ton guns..	3	12	36	108	
	10-inch..	27-ton guns..	6	8	48	144	
	8-inch..	13-ton guns..	4	8	32	96	
	12-inch..	Mortars	16	8	128	384	
Total.....			29	36	244	732	732
Galveston, Tex.....	8-inch..	13-ton guns..	8	8	64	192	
	12-inch..	Mortars	16	8	128	384	
Total.....			24	16	192	576	576
Portland, Oregon	10-inch..	27-ton guns..	12	8	96	288	
	8-inch..	13-ton guns..	7	8	56	168	
	12-inch..	Mortars	32	8	256	768	
Total.....			51	24	408	1,224	1,224
Pensacola, Fla	12-inch..	50-ton guns..	2	12	24	72	
	10-inch..	27-ton guns..	4	8	32	96	
Total.....			6	20	56	168	168
Wilmington, N. C	12-inch..	50-ton guns..	4	12	48	144	
	10-inch..	27-ton guns..	5	8	40	120	
Total.....			9	20	88	264	264
San Diego, Cal.....	10-inch..	27-ton guns..	4	8	32	96	96
Portsmouth, N. H	12-inch..	50-ton guns..	4	12	48	144	
	10-inch..	27-ton guns..	4	8	32	96	
Total.....			8	20	80	240	240
Cumberland Sound, at Fort Clinch.....	12-inch..	50-ton guns..	2	12	24	72	
	10-inch..	27-ton guns..	2	8	16	48	
Total.....			4	20	40	120	120
Kennebec River, at Fort Popham	10-inch..	27-ton guns..	3	8	24	72	72
New Bedford, Mass.....	8-inch..	13-ton guns..	3	8	24	72	
	12-inch..	Mortars	16	8	128	384	
Total.....			19	16	152	456	456
Penobscot River, at Fort Knox.....	10-inch..	27-ton guns..	3	8	24	72	72
New Haven, Conn.....	8-inch..	13-ton guns..	3	8	24	72	
	12-inch..	Mortars	8	8	64	192	
Total.....			11	16	88	264	264
Grand total			1,305				34,968

In addition to the 1,305 guns of modern construction enumerated above, the Board on Fortifications reported that there are 2,020 sea-coast guns now on hand available for use exclusive of sea-coast mortars. The Board decided that all of these guns are essential for the protection of torpedo lines and the defense of the minor ports not mentioned in the above list. The number of artillerymen necessary to properly man them in time of war is shown in the following statement:

Gun.	No. on hand.	One-gun detach- ment.	One re- lief for all guns.	× 3 for one day's action.
20-inch smooth-bore Rodman.....	2	18	36	108
15-inch smooth-bore Rodman.....	308	12	3,696	11,088
10-inch smooth-bore Rodman.....	998	8	7,984	23,952
8-inch smooth-bore Rodman.....	210	8	1,680	5,040
100-pounder rifled Parrott.....	173	8	1,384	4,152
200-pounder rifled Parrott.....	81	8	648	1,944
300-pounder rifled Parrott.....	38	8	304	912
Converted rifles.....	210	8	1,680	5,040
Total.....	2,020			52,236

SUMMARY.

	Men.
Total for proposed armament.....	34,968
Total for guns on hand.....	52,236

Total..... 87,204

Or, omitting the lake ports, 86,234 artillerymen.

But it is unnecessary to maintain so great a force in time of peace. Were the proposed armament in a forward state of completion, as in a few years it will be, one-tenth of the above number should be provided, although even then we should have only one-half the number generally regarded as the peace footing of artillery troops, viz, one-fifth the war strength. It would furnish only one trained artillery-man in every ten needed in war, which is not an unreasonable demand. Moreover, this number will be necessary for the proper care of the new armament and artillery machines. Even now one-half this number (or one-twentieth of the whole) are needed to care for the armament already on hand and the present fortifications, as well as for the instruction of our sea-coast militia. I therefore respectfully recommend that this requisite force be obtained by a reorganization of the existing five regiments of artillery into seven regiments, as elsewhere suggested, and by a small increase in the number of enlisted men heretofore allowed by the annual appropriation bills. On a basis of six hundred men to each regiment, plus 50 mechanical engineers, this will give the one-twentieth now deemed necessary. By a simple expansion, as the wealth and population of the nation grow, this force can be increased to the ultimate one-tenth, and thus the reorganization here recommended would, without change, answer all demands for many years to come.

The following detailed statement will indicate the necessity and proposed distribution of the artillery force above suggested. In making this distribution regard has been had as far as possible to the proper ratio between the proposed peace garrison and the estimated war garrison. At the same time the actual existing accommodations for troops, as well as the proximity of the places named to the more important

masses of organized militia in our sea-coast States, have influenced the distribution here recommended:

	Batteries.
Fort Preble, Portland, Me.....	2
Boston, Mass.:	
Fort Warren.....	4
Fort Independence.....	2
	<hr/> 6
Fort Adams, Narragansett Bay.....	4
Fort Trumbull, New London, Conn.....	2
Fort Schuyler, East River, New York.....	3
Narrows and Sandy Hook:	
Fort Hamilton.....	4
Fort Wadsworth.....	6
	<hr/> 10
Delaware River:	
Fort Mifflin.....	2
Fort Delaware.....	2
	<hr/> 4
Fort McHenry, Baltimore, Md.....	3
Washington and Lower Potomac:	
Washington Barracks.....	4
Fort Foote.....	2
Fort Washington.....	2
	<hr/> 8
Fort Monroe, Hampton Roads.....	8
Fort Pulaski, Savannah River.....	2
Gulf ports:	
Key West.....	3
Pensacola.....	2
Mobile.....	1
New Orleans.....	3
Galveston.....	1
	<hr/> 10
Presidio of San Francisco.....	8
Fort Canby, Columbia River.....	2
	<hr/>
Total.....	72

Adding twelve light batteries, the whole number will be eighty-four (seven full regiments). This is manifestly the least number of batteries that can possibly perform the service required.

Of these twenty-one posts, not more than seven, viz, Forts Adams, Trumbull, Hamilton, Wadsworth, Washington Barracks, Presidio of San Francisco, and Fort Canby, are, or upon the completion of work now in progress soon will be, ready to receive the proposed garrisons. I respectfully recommend that the more or less extensive additions and repairs to the barracks and quarters which will be necessary to accommodate the required garrisons at the other posts be made as soon as practicable. Until the work of fortification is begun, the construction of barracks at Charleston, Mobile, and Galveston is not recommended; the garrisons of these posts to be kept for the present at Atlanta, Key West, Pensacola, and New Orleans. No garrison is now recommended for Wilmington or the mouth of Cape Fear River, because this point is one of the last to be fortified. Moreover the small force available for garrisoning the Atlantic coast should be concentrated towards the northern and southern extremities, the parts most liable to sudden attack in the event of war.

I also recommend that barracks and quarters for one regiment of infantry be constructed at Plattsburgh, New York, and would suggest that special appropriations be asked for to provide all the buildings required at these important Eastern posts, as has been done heretofore for the more important and permanent posts of the West.

I also recommend that estimates be submitted for the funds necessary to complete the important posts heretofore especially authorized, so that the work may be finished without delay. The abandonment of posts no longer useful and the concentration of the troops at the most desirable stations, according to the well-matured plans of the War Department approved by Congress, depend upon the completion of the central posts.

I have the honor to be, sir, your obedient servant,

J. M. SCHOFIELD,
Major-General, Commanding.

Hon. REDFIELD PROCTOR,
Secretary of War.

REPORT OF THE ADJUTANT-GENERAL.

HEADQUARTERS OF REGIMENTS.

CAVALRY.

- | | |
|----------------------------|--------------------------|
| 1. Fort Custer, Mont. | 6. Fort Wingate, N. Mex. |
| 2. Fort Walla-Walla, Wash. | 7. Fort Riley, Kans. |
| 3. Fort Clark, Tex. | 8. Fort Mead, Dak. |
| 4. Fort Lowell, Ariz. | 9. Fort Robinson, Nebr. |
| 5. Fort Reno, Ind. T. | 10. Fort Apache, Ariz. |

ARTILLERY.

- | | |
|---|-------------------------|
| 1. Presidio of San Francisco, Cal. | 4. Fort McPherson, Ga. |
| 2. Fort Adams, R. I. | 5. Fort Hamilton, N. Y. |
| 3. Washington Barracks, Washington, D. C. | |

INFANTRY.

- | | |
|-----------------------------|------------------------------|
| 1. Angel Island, Cal. | 14. Vancouver Bks., Wash. |
| 2. Fort Omaha, Nebr. | 15. Fort Buford, Dak. |
| 3. Fort Snelling, Minn. | 16. Fort Douglas, Utah. |
| 4. Fort Sherman, Idaho. | 17. Fort D. A. Russell, Wyo. |
| 5. Fort Bliss, Tex. | 18. Fort Clark, Tex. |
| 6. Fort Leavenworth, Kans. | 19. San Antonio, Tex. |
| 7. Fort Logan, Colo. | 20. Fort Assinniboine, Mont. |
| 8. Fort Niobrara, Nebr. | 21. Fort Sidney, Nebr. |
| 9. Whipple Barracks, Ariz. | 22. Fort Keough, Mont. |
| 10. Fort Marey, N. Mex. | 23. Fort Wayne, Mich. |
| 11. Madison Barracks, N. Y. | 24. Fort Bayard, N. Mex. |
| 12. Fort Yates, Dak. | 25. Fort Missoula, Mont. |
| 13. Fort Supply, Ind. T. | |

REPORT OF THE SURGEON-GENERAL.

HEALTH OF THE ARMY.

The mean strength of the commands, officers and men, white and colored, from which medical reports were received during the year amounted to 24,726. There were 31,420 admissions to sick report, of which 25,415 were for disease and 6,005 for injury, equivalent to 1,270.73 entries for every thousand men of the strength present, and giving a daily or constant sick rate of a little over 4 per cent. of the command. The deaths numbered 218, equivalent to an annual death-rate of 8.15 per thousand of strength; and the discharges for disability 742, equivalent to a rate of 27.75.

A brief study of these statements, and their comparison with the corresponding statistics of other bodies of men, will suffice to show that the health of the Army during the year has been well up to the average of a well-cared for force. In civil life the health of a community is determined by a consideration of the death-rate per thousand of the population. The statistics of the Army are more extensive and precise; they give the death-rate, by which comparison may be made with the corresponding facts collected by State and municipal boards of health; but they give also the number of cases of sickness in which the deaths occurred, and, what is of most importance in a military point of view, the daily sick-rate or percentage of non-effective men in the aggregate strength present and the number of men lost to the service by disability occasioned by disease or injury.

The death-rate for the year was for the Army, 8.15—whites, 7.55; colored, 13.66 per thousand of strength. The corresponding figures for last year were 8.12, 7.85, and 10.71; and for the decade ending December 31, 1886, 10.23, 9.97, and 12.91. This is a satisfactory showing, as may be seen by comparing it with the 1886 mortality-rate of the British army, 11.48, or of the Italian army for the same year, 9.31; but that it is not so low as it might be under improved sanitary conditions and surroundings is evidenced by the low death-rate for 1887 in the army of Austria-Hungary, 6.95. But evidently these comparisons, although showing that service in one army is more dangerous than in another, tell nothing as to the point which is of most interest, whether the deaths in the one army or in the other are more numerous than they ought to be were all due care taken of the health of the soldiers. The climate, exposures, and special diseases from which each army has to be protected are probably different; and no satisfactory comparisons as to the results of the care exercised in protecting the men can be made. There is, moreover, another source of difficulty in effecting comparisons of this kind. It may readily be seen that the death-rate of an army will have a certain dependence on the issue or withholding of discharges for disability. If a man affected with an inevitably fatal disease be discharged that he may go home to die, the death-rate is correspondingly lessened.

In comparing the rate with that of men of corresponding ages in civil life the preponderance of violent deaths in the Army must be considered. This preponderance must be expected from the nature of the service of the soldier as compared with the more restricted and defined conditions of danger in civil life. Hence to compare, by means of its death-rate, the *health* of a military command with that of a body of

civilians of the same age, deaths from disease only should be held in view. These deaths in the Army during the present year numbered 6.09. The death-rate, from disease, of civilians of the military age, as shown by the tables of the Tenth Census, was, during the census year, 6.87.* But on the one hand the acknowledged defects of the census returns must be remembered, and, on the other, the influence which discharges from the Army exercise in keeping down its recorded death-rate. It is not possible, therefore, to make accurate comparisons between the death-rate of civilians and soldiers, nor, as will be now pointed out, is this needful.

The standard of comparison for the health of an army is *its own best annual record*. Outside of unusual vicissitudes, exposure, and epidemics, and of the insanitary conditions which bring disease and death into the ranks of an army during campaigns, the sanitary surroundings of the soldier do not vary much from year to year except in so far as they are modified by intelligent efforts for their improvement. What has been accomplished in the past should therefore be effected in the present, or a satisfactory explanation should be given of the cause of the failure, which would thus be converted into a source of protection for the future. Excluding deaths from injury and epidemics of cholera and yellow-fever, the lightest mortality record of the United States Army was that of the year 1885, when the rate of 4.76 was recorded. As the rate for the past year, 6.09, is by no means markedly in excess of this exceptional standard, I am justified from this point of view in claiming that during the year the health of the Army has been well up to the average of a well-cared for force.

The discharges numbered 742, equal to a rate of 27.75 per 1,000 of strength. This is but slightly in excess of the rate of the year 1887, 27.03, and considerably less than that of the decade ending December 31, 1886, 32.36. While this may be viewed as satisfactory in so far as it is a better record than is given by many of our past years, the corresponding rates of the British and the Italian armies for 1886, 15.03 and 13.29, respectively, and of the army of Austria-Hungary for 1887, 14.10, manifest clearly that there is a fault somewhere in our methods, or that our men break down more readily than those of the armies mentioned. The latter supposition can hardly be entertained, because if our troops become disabled thus readily they would die in proportion; but their death-rate, as already shown, compares favorably with those of foreign armies. On the other hand, the first suggestion is strengthened by the fact that of the 742 discharged men no less than 129 were declared by the medical officers who issued the certificates to have been in their disabled condition when they were enlisted as recruits. This is denied in general terms by the officers on duty at the recruiting depots, who instance the careful supervision held over the recruits during their probationary period, and suggest that the post surgeons yielded too readily to the importunities of dissatisfied men. It is difficult to get at the facts in these cases, but one fact is evident, that the proportion of discharges for disability in our Army is excessive, and that the utmost care should be taken at both depots and posts to reduce their number in the future.

The admissions to sick report during the year amounted to 1,276.73 as compared with 1,248.88 in 1887 and 1,615.49 during the decade ending

* The male population of the United States, white and colored, between and including the ages of twenty and forty-four, as given in Table VII of the Statistics Mortality of the Tenth Census, was 8,987,358.

December 31, 1886. When these admissions are compared with those of foreign armies our service appears to a disadvantage. Thus, the Austria-Hungarian and the British armies, for the years already specified, gave 1,023.36 and 1,085.05 admissions, respectively, and the Italian 797.89. It is not that the United States soldier is taken sick more frequently than his brother-in-arms in Europe, but that he is officially taken on sick-report whenever he is excused from duty by the medical officer, however trivial the cause. When it is observed that less than half of the 796.89 admissions from the army of Italy resulted in 9.31 deaths,* while the 1,270.73 of the United States troops had a mortality of only 8.15, it is evident that the admissions in the two instances do not constitute facts of equal gravity, and are therefore not available for comparison.

But the number of men withdrawn from the aggregate strength of the command, the average number on sick report daily, or the rate of non-effectiveness from disease or injury, is a fact of equal importance in all armies, and may be justly used for purposes of comparison, as it embodies not only the number of admissions but the gravity of the cases. During the year 41.91 men out of every thousand were constantly on sick report or non-effective, as compared with 42.33 during the year 1887, and 43.70 during the preceding decade. To put these facts in different terms: The average loss of time by sickness for each man in the Army during the year was 15.3 days, during the preceding year 15.5, and during the preceding decade 15.9 days. Here the accurately kept records of the medical department give a clearly defined expression to the gradual progress that is being made in practical sanitation and the improvement of the condition of the soldier. This progress is slow; but it is necessarily so as we advance towards the rate which is inevitable on account of the liability of the human system to accident and sickness. If we look back a quarter of a century or more to the years immediately preceding or following the war of the rebellion, the progressive movement may be better appreciated. The average death-rate from disease, exclusive of cholera or yellow-fever, in the Army during the years 1840-1859, but not including the years of the Mexican war, was 18.98 per thousand of strength, and the corresponding rate of the year following the war was 19.29, as compared with the rate of the present year, 6.09.

When our non-effective 41.91 per thousand of strength is compared with the rates of the foreign armies mentioned, it is found that our Army takes a middle place between those of Italy and Austria-Hungary on the one hand, 34.41 and 39.94, respectively, and Great Britain on the other, 57.69. Or, when the facts are expressed as time lost during the year by each man of the force, the 15.3 days' sickness of the United States soldier is placed in comparison with 12.56 on the part of the Italians, 14.58 on the part of the Austria-Hungarian, and 21.06 on the part of the British soldier.

A bird's-eye view of the principal facts to which reference has been made in these remarks may be found in the following tabular statement:

* See appended papers, Table V.

Mean strength and ratios of admissions, deaths, discharges, and constant non-effectiveness per 1,000 of mean strength for various armies.

Army.	Mean strength.	Ratios per 1,000 of mean strength.						Average sick time to each soldier (days).
		Admissions.			Deaths.	Discharges.	Constantly non-effective.	
		Hospital or infirmary.	Quarters.	Total.				
United States, 1888.....	24, 726	621. 61	649. 12	1, 270. 73	8. 15	27. 75	41. 91	15. 3
United States, 1887.....	23, 841	604. 13	642. 75	1, 246. 88	8. 12	27. 08	42. 38	15. 5
United States, 1877-1886.....	23, 670			1, 615. 49	10. 23	32. 36	43. 70	15. 9
Austria-Hungary, 1887.....	269, 845	365. 96	657. 40	1, 023. 36	6. 95	14. 10	39. 94	14. 58
Great Britain (home and colonial), 1886.....	188, 739	1, 085. 05		1, 085. 05	11. 48	15. 03	57. 69	21. 06
Italy, 1886.....	204, 428	430. 36	367. 53	797. 89	9. 31	13. 29	34. 41	12. 56

NOTE 1.—The mean strength, admission, death, and non-effective rates for the English army do not include officers.

NOTE 2.—The ratios of deaths and discharges in the United States and the English armies are based on the mean strengths as furnished by their respective adjutants-general.

The average strength of the Army, 24,726, was composed of 22,310 white and 2,416 colored troops. It is well known to the student of vital statistics of civil life that the death-rate of our cities which have a mixed population is generally greater than that of those in which there is no colored element. The death-rate of people of African descent is always higher than that of the whites living in the same settlement. This is ascribed, for the most part, to the comparative poverty of the colored people, which crowds them in their dwellings in the less desirable parts of the locality. It would seem, however, from the medical reports of the Army, that there is a race proclivity to disease and death; for although the colored troops are in all respects subject to the same influences as the white troops at the same stations, the cases of sickness, and notably the death-rates, are greater among them than among the whites. Both sets of men are selected by the same recruiting officers, sent to the same depots, transferred for service to the same posts, lodged in similar quarters, provided with the same allowance of clothing, use the same water and the same food-supplies, perform the same duties and are subject to the same exposures, and yet during the year the admission to sick-report from the colored ranks were 1,464.82 per thousand of strength as compared with 1,249.71 among the whites, the non-effectives 44.56 in every thousand as compared with 41.62, the discharges 28.48 as compared with 27.67, and the death-rate 13.66, while that of the white troops was only 7.55. Last year a similar preponderance prevailed in the admissions; the non-effectives were 46.67 as against 41.99; the discharges 31.71 as against 26.61, and the deaths 10.61, while those of the white troops numbered only 7.85 in every thousand. Similar results are observed in following the comparative statistics back through the history of the colored troops in our Army; and the same race proclivity is manifested by the records of the British forces in the West Indies, as may be seen by the following tabular statement:

Year.	Ratios per 1,000 of mean strength.			
	Admissions.	Deaths.	Discharges.	Constantly non-effective.
1886.....	{ White..... 1, 168. 6	14. 70	11. 76	55. 09
	{ Colored..... 1, 292. 8	19. 64	16. 07	57. 25
Decade 1876-1885.....	{ White..... 893. 5	15. 42	13. 95	44. 68
	{ Colored..... 1, 074. 1	15. 38	26. 79	58. 38

The five most important of the classified causes of disability among the troops during the year stood in the following order in their relation to the production of non-effectiveness: Injuries causing 8.36 of the total of 41.91 constantly disabled; venereal disease, 5.24; diseases of the respiratory organs, 3.87; diseases of the digestive organs, 3.42, and malarial diseases, 3.12. These causes held the same place in order of importance among both the white and the colored troops, in the former occasioning, 8.24, 5.18, 3.73, 3.36, and 3.13, respectively, and in the latter, 9.47, 5.84, 5.18, 4, and 3.04.

In order of importance in relation to admissions the five most prominent of the classified causes were, in the Army as a whole, injuries, giving rise to 242.86 of the total of 1,270.73 admissions; diseases of the digestive organs, 173.06; diseases of the respiratory organs, 123.68; malarial diseases, 118.22, and diarrhoeal diseases, 114.58. The same order held good among the colored troops: Injuries, 300.50; digestive, 247.10; respiratory, 177.57; malarial, 110.93, and diarrhoeal, 99.75; but among the whites malarial diseases and those of respiration changed places, the order being thus: Injuries, 236.62; digestive, 165.04; malarial, 119; respiratory, 117.84, and diarrhoeal, 116.18.

In 1887 diarrhoeal diseases took the third place as a cause of admissions, the rate being 138.71, the other causes holding the same position as during the present year except for this interpolation. During the decade ending December 31, 1886, diarrhoeal diseases contended with those of respiration for the second place, the former having 204.95; diseases of digestion held the fourth place with 188.02, and malarial diseases the fifth with 184. The fall of the rates of respiratory, diarrhoeal, and malarial diseases from the figures just given to 123.68, 114.58, and 118.22 during the present year, may be set down as evidence of the increased care given to the diet, clothing, and quarters of the Army.

I have stated that the rates of admission per thousand of strength in different armies are not susceptible of comparison on account of local rulings as to the severity which calls for admission; but in looking over the tables of comparison it is evident that skin and venereal diseases occupy a more prominent place as causes of admission among foreign armies than in that of the United States. Of the 1,023.36 admissions on the rolls of the Austro-Hungarian army, in 1887, skin diseases held the first place with 212.64 cases; then follow diseases of the digestion, of respiration, injuries, and fifthly, venereal diseases with a rate of 64.57. The 1,085.05 admissions in the army of Great Britain, in 1886, consisted of, first, 254.29 venereal; then follow in order of frequency, with somewhat over one hundred cases each, digestive and malarial diseases and injuries, ending with 105.17 skin diseases. Of 353.06 admissions per thousand of strength specially tabulated in the Italian report for 1886, 57.44 consisted of respiratory diseases, 47.64 venereal, 37.25 digestive, 24.72 malarial and 18.58 integumentary. In the Army of the United States the total of 1,270.73 comprised 80.88 venereal and 76.40 cases of integumentary disease.

The causation of the 8.15 deaths which occurred during the year in every thousand men of the Army, as a whole, is referable mainly to respiratory diseases, 2.09; injuries, 2.06; digestive, .86; circulatory, .64; and specific febrile, .56. The prominence assumed by diseases of the lung is due, as will be seen directly, to their fatality among the colored troops. Among the white soldiers injuries give the largest number of deaths, 1.95, and lung diseases, 1.58, take second place, diseases of digestion and of circulation following with .91 and .66, respectively, and specific febrile diseases coming in fifth with a rate of .58 per thousand;

but among the colored troops lung diseases are accountable for no less than 6.83 deaths, a rate higher than that produced by all diseases among the whites; injuries are second in order of fatality, having occasioned 3.04 deaths, while diseases of the nervous system, diarrhoeal and malarial troubles, each claim the third place with a rate of .76 per thousand.

As compared with last year there has been an increased fatality from diseases of the lung, occurring chiefly among the colored troops, and a diminished rate for diseases of digestion and specific fevers, the classes of disease having fallen in thus in their order of fatality: Injuries, 2.47; respiratory, 1.59; specific febrile, .63; diseases of the nervous and of the circulatory systems, each .64. The preceding decade has the same order of fatality as the year 1887 except that diseases of digestion take the fifth place with .58 instead of those of the nervous system, and specific fevers have the higher rate of .92.

In comparing the death-rates caused by certain groups of diseases in our Army with the same class of facts as given in the reports of foreign armies there is little to attract attention except the entries under the heading *specific febrile diseases*. These are the diseases against which measures of prevention are chiefly directed, not merely because their introduction may be prevented and their prevalence restricted by suitable measures, but because of their exceedingly dangerous character when a focus of infection has once become established in a body of troops. The comparison gives a favorable showing to our records for the past year. Our death-rate from these diseases was .56 as against 1.11 in the army of Austria-Hungary, 2.70 in the Italian, and 3.73 in the British army.

The absolute number of deaths during the year was 132, of which 135 were caused by disease and 47 by injury. Pneumonia was the most deadly of the single causes, its result having been fatal in 39 cases; typhoid fever caused 13 deaths; pulmonary consumption, 12; heart disease, 12; peritonitis, 7; diseases of the liver, 7, and other diseases of the digestive organs, 9. Of the deaths from injury 13 were caused by gunshot and 14 by drowning.

While the death-rate of the Army falls mainly under a few headings, injuries and lung disease, for instance, contributing one-half of the total, the discharges for disability are scattered more evenly over the classified list of diseases. Of the 27.75 discharges effected by medical officers during the year, from 2 to 3.5 are charged against each of the following diseases: Venereal diseases, injuries, diseases of the nervous system, of the respiratory, locomotor, and circulating systems, constitutional diseases, and those of the digestive organs. The notable differences between the white and the colored troops in this regard are that the latter have a higher rate for injuries and venereal diseases than the whites, 4.93 and 4.55, respectively, as against 3.28 and 3.48, and a lower rate for nervous diseases, 2.28 as against 3.53.

The discharge-list for the year differs so little from that of 1887 that the statement just given as to the distribution of the causes might be applied with accuracy to that of the latter year; and if the numbers in the statement were expanded so as to read from 2 to 4 instead of from 2 to 3.5, it would be equally applicable to the average of the discharge-list of the decade immediately preceding the year 1887.

Comparing the list of the present year with those of the foreign armies mentioned, lower rates than with us are found in the latter under almost every heading, and especially under that of venereal diseases; for while our rate in this case is 3.59 out of every thousand men,

the British army, which we have seen to have a much larger number of admissions of this kind, discharged only .37, the Italian army .04, or one man in 25,000, and the Austro-Hungarian .02, or a truly exceptional case in every 50,000 men.

The absolute number of discharges was 742, of which 650 were for disease and 92 for the results of injury, the classified list including rupture among the former. Venereal diseases lead the list as responsible for the loss of 96 men, or nearly 13 per cent. of the total number of discharges; rheumatism and diseases of the circulation caused the loss of 69 men each; pulmonary phthisis, 45; insanity, 37; hernia, 32; eye diseases, 28; epilepsy, 20; miasmatic diseases, 18; bronchitis, 16; old age and its results, 14; diarrhœa and dysentery, 12, and diseases of the ear, 11. Of the 92 discharges referable to injury, 12 were occasioned by sprains and contusions, 15 by fractures, and 23 by gunshot.

During the year 134 enlisted men were discharged from the service and 3 sent to the Insane Asylum, District of Columbia, on account of diseases or defects which existed prior to enlistment: Of the 134 discharges, 129 were on certificates of disability and 5 by order of the War Department; 122 were among white and 12 among colored troops; 44 were from the cavalry, 16 from the artillery, 71 from the infantry, 2 from the hospital corps, and 1 from the provost guard of the military prison. Fifty-three of these men were examined at the rendezvous at David's Island, N. Y., 34 at Jefferson Barracks, Mo., 9 at Columbus Barracks, Ohio, and 38 at various other recruiting stations.

The following table shows the cause of discharge and length of time in service of these 134 men:

Cause of discharge.	Total cases.	Time in service.					
		Less than six months.	Six to twelve months.	First year.	Second year.	Third year.	Fourth year.
Dysentery.....	1				1		
Syphilis, chronic.....	12		7	1			2
Gonorrhœa.....	2		1	1			
Alcoholism.....	2		1				1
Morphia, effects of.....	1						
Malformation (<i>a</i>).....	10	1	5	1	1	1	
Debility.....	4		3		1		
Scrofula.....	2		2				
Rheumatism, chronic.....	4	1	1				1
Hip joint, disease of.....	1	1					
Neuralgia (<i>b</i>).....	3		2	1			
Epilepsy.....	19	5	6	5	1	1	1
Mental incapacity.....	14	6	5	1			1
Diseases of the eye (<i>c</i>).....	6	1	3	1			1
Diseases of the ear and nose (<i>d</i>).....	4	2	1			1	
Diseases of the heart (<i>e</i>).....	19	1	11	4		1	2
Varicose veins.....	1		1			1	
Diseases of the respiratory system (<i>f</i>).....	4	1	3				
Diseases of the digestive system (<i>g</i>).....	5		3	1			1
Diseases of the genito-urinary system (<i>h</i>).....	7	2	3	2			
Injuries, sequence of.....	12	2	7		1		2
Osteomatous growth.....	1	1					
Totals.....	134	24	64	21	7	4	10

a Feet, 5; bunions, 4; chest, 1.

b Intercostal, 1; sciatica, 1; headache, 1.

c Nystagmus, 1; conjunctivitis, 3; defective vision, 2.

d Nasal catarrh, 3; deafness, 1.

e Angina pectoris, 2; dilatation, 2; hypertrophy, 2; valvular, 2; functional, 3; organic, 1; irregularity, 7.

f Emphysema, 2; phthisis, 2.

g Pharyngitis, 1; hernia, 2; hemorrhoids, 1; prolapsus ani, 1.

h Incontinence of urine, 4; atrophy of testicles, 1; varicocele, 2.

In consideration of the fact that during the year 54.5 per cent. of the applicants for enlistment were rejected * it seemed hardly possible that a charge of carelessness could be substantiated against the recruiting service; nevertheless, as the discharge by post medical officers of so many men for disability alleged to have existed prior to enlistment reflected so strongly on the medical officers connected with the recruiting stations, a special inquiry was instituted in a number of cases into the history of the recruits while at the depots. These men had been examined by the recruiting officer and occasionally by a medical examiner at the rendezvous, and within two days after their arrival at the depot they had been subjected to a close examination under the rules prescribed in Greenleaf's *Epitome*. Subsequently they were detained at the depot for at least three months, during which they not only performed all garrison duties, but were under observation on the drill ground for hours at a time. Having thus proved their ability to perform the duties of a soldier, they were again examined, this time by a board consisting of the commanding officer and the medical officer of the depot, to insure that no doubtful material should be transferred to the regiments. A man who was liable to break down from an existing disability would be likely, if he appeared on the sick-report at all, to appear as affected by reason of his disability; yet of the 96 men in the above tabulation who passed their probationary term at the depots at David's Island, Columbus Barracks, and Jefferson Barracks, 4 only were treated for diseases akin to those for which they were finally discharged, although no less than 47 of them were on sick-report at one time or another during their stay—37 for disease and 10 for injury. In most of the cases also the basis on which the disability was subsequently claimed and allowed was noted by the depot surgeon or the examining board, duly considered, and decided as not constituting an objection to enlistment. There is a certain number of men who enlist under the pressure of necessity, and after a time, when the pressure is no longer felt, regret the step that they have taken, and desire to be again free from the restraints of military discipline. If any of these have a physical defect which is not of itself sufficient to prevent enlistment, but merely to cause inquiry, it is made little or much of by the soldier according as his object is to enlist or leave the service. At the depot it is concealed as much as possible from the medical officer, and if observed is slighted as of no moment. After assignment, when military restraint becomes irksome or personal interests are involved in a return to civil life, the defect and the disability it engenders are pressed into the observation of the post surgeon and company commander until a discharge for disability is obtained. The cases specially examined were of this nature; and it seems probable that if the whole history of each of these cases of discharge could be elicited they would be found in the majority of instances to belong to this class. An important lesson is taught by this record which should be impressed on the minds of medical officers connected with the recruiting service: To enlist no man who has any physical defect which at a future time might be made the basis of an alleged permanent disability.

The following extracts give the views of depot surgeons on the above list of discharges:

David's Island, N. Y., Surgeon J. V. D. Middleton: "Considering the careful examinations at this depot, and the number of recruits eliminated, it is incomprehensible to me that so large a number of men are discharged for disability so soon after joining their regiments."

* See table on p. 206.

Of a case discharged for feeble heart action, Surgeon V. B. Hubbard, *Columbus Barracks, Ohio*, says: "I state, without qualification, that it would have been a physical impossibility for him to have executed the violent exercises required of every recruit at the second examination upon his arrival at the depot and the setting up drills to which the recruits are subjected, with any marked or noticeable feebleness of heart's action." Of a case discharged for mental imbecility he remarks: "Nothing abnormal in his mental condition could be detected at the examinations; he went through the prescribed exercises in a satisfactory manner, and answered all questions intelligently." Concerning a case discharged for an old wound of the left ankle he says: "The injury was noticed at examination, and, in order to test whether the wound affected the movements of the joint, he was put through an exercise of hopping upon the toes of the left foot over a distance of forty yards or more, which exercise he executed perfectly, showing no lameness or disability of the joint. He is, undoubtedly, a malingerer, and has evidently imposed upon the surgeon who gave the certificate for his discharge. Instead of being discharged from the service for the alleged disability, he should, in my opinion, have been brought before a general court-martial and tried and punished for malingering. I remember this case very distinctly from the fact that several months ago the soldier again appeared at this depot, having enlisted at Detroit under the name of James H. Burt. He was recognized and held over at the second examination by reason of fraudulent enlistment, having been previously discharged for disability. At this examination he was again rigidly examined by myself and Assistant Surgeon B. D. Taylor as to injury of the left ankle joint and put through the same violent exercise as mentioned above on the occasion of his first examination, but no impediment in movement or weakness of the joint existed. Upon my recommendation the man was held to service by the board of inspectors, which action was approved by the proper authorities. He has since been assigned to Battery A, Second Artillery, and is now in the service."

Jefferson Barracks, Mo., Surgeon E. McChellan: "A very important part of the duty of medical officers at this station is the examination of recruits who arrive from the various rendezvous, and of such persons as present themselves for enlistment. The records show that in 1884, 2,000 recruits were examined; in 1885, 1,324 recruits were examined on arrival and 113 for enlistment; in 1886, 2,049 were examined on arrival and 111 for enlistment; in 1887, 2,151 on arrival and 147 for enlistment; in the first six months of 1888, 1,152 were examined on arrival and 121 for enlistment; making a total of 9,168 examinations. Each recruit who is assigned to a regiment is subjected to a careful inspection before he leaves the depot. This final examination is as thorough as the original. Several times during my term of duty at this depot I have been called upon to explain the reported disability of certain recruits who have been assigned to regiments. In this connection I desire to state that no man has been allowed to leave the depot, to my knowledge, concerning whom any doubt was had as to his being able to perform the duties of a soldier. I have on several occasions allowed men who were convalescing to leave before they were fully recovered, that they might obtain the benefit of a change of climate, but on such occasions it has been my custom to transfer the man to the hospital of the station to which he was going, or to communicate personally with the medical officer at that station."

Influence of age and length of service on the rates.—Soldiers of the age 25-29 had an admission rate, 1,236.86, similar to that of the average of the Army, 1,270.73; younger men came more frequently on sick report; older men less frequently. The age 25-29 had also the average of non-effectiveness of the Army; younger men had a larger rate on account of the greater frequency of their admissions; older men had a smaller rate up to 45 years, but after this age the rate of non-effectiveness became greater—in other words, the veteran soldier appeared less frequently on the sick-list, but when he did appear the cause was such that he had to remain non-effective for a considerable period. In the case of deaths the rate increased markedly after 40 years of age; 6 to 7 per thousand of strength up to 39 years of age; 12 during the age 40-44; 15 during 45-49, and 21 during 50-54. So also the ratio of deaths to admissions was small among the younger men who came frequently on sick report, ranging from 4 deaths per thousand cases among those under 20 years of age, 6 among those from 20 to 35, and 8 from 35 to 39, up to 13 among men of 40-44, 16 among those of 45-50 years, and 24 per thousand admissions of those from 50-54 years of age.

Similar results are obtained when, instead of age, length of service is regarded: Those who were serving their third year had an admission rate of 1,250.43, almost equal to that of the Army as a whole; those who had not served so long had larger rates, and those who had served longer had smaller rates, with the exception of the men who were serving the first year of their first re-enlistment. Men having five to fifteen years of service gave the lowest rates of non-effectiveness.

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REPORT OF THE PUBLICATION OF THE WAR RECORDS.

WAR DEPARTMENT,
OFFICE OF THE BOARD OF PUBLICATION OF THE
OFFICIAL RECORDS OF THE REBELLION,
Washington, D. C., October 16, 1889.

SIR: The following report of the Board of Publication of the Official Records of the War of the Rebellion is respectfully submitted for the information of the honorable Secretary of War:

On July 1, 1889, the state of the work was as follows: Volumes XXIV to XXIX, inclusive, comprising fourteen books, were stereotyped, and the indexes to Volumes XXIV and XXV were nearly completed. The manuscript of Volumes XXX to XXXVIII was in an advanced state of preparation for publication.

So soon as the appropriation for the current year became available, the indexes to Volumes XXIV and XXV were completed and the orders for printing issued. Work on the indexes of Volumes XXVI and XXVII was begun, and the compilation of the volumes from XXXIX forward was continued. As a result, at the date of this report, Volumes XXIV and XXV (Vicksburg and Chancellorsville), comprising five books, have been printed and bound, and are in course of distribution. The index to Volume XXVII (Gettysburg) is about completed, and the order for printing Parts I and II will be issued on October 20. The index to Part III of Gettysburg will be completed in time to send that volume to press on October 31, while the index of Volume XXVI (Port Hudson) will be completed and the books printed during the month of November. To sum up, ten volumes, comprising the important campaigns of Chancellorsville, Gettysburg, Vicksburg, and Port Hudson, will have been printed and distributed on or before December 1, 1889. The indexing of Volumes XXVIII (Charleston Harbor), XXIX (Mine Run), XXX (Chickamauga), and XXXI (Chattanooga and Knoxville) will fully occupy the attention of the indexing force during the remainder of the fiscal year.

Since July 1, two parts each of Volumes XXX and XXXI have been stereotyped. Part III of Volume XXX will go to press on October 31, and the corresponding part of Volume XXXI on or before December 31, 1889; at which date the work will be in type up to the end of the year 1863.

A thorough examination of the records of the Department develops the fact that many volumes already compiled and which were believed to be complete, especially those containing correspondence, stand in need of considerable revision before they are sent to the press. This

revision will consume from two to five months of time in each case, depending upon the amount of new matter developed. It will increase considerably the size of the volumes, but will add greatly to their accuracy and completeness and will cause no material delay in publication.

The work of compilation of the second series, relating to prisoners of war, was taken in hand by Mr. Leslie J. Perry immediately upon his appointment as a member of the Board of Publication. Much preliminary work has been done by him in the matter of examination and selection of material, and the series will be well advanced during the current fiscal year. The third member of the Board, Mr. Joseph W. Kirkley, of the Adjutant-General's Office, was appointed on July 22, 1889, and assumed charge of the preparation of returns of strength, rosters of organization, and tables of casualties, together with the supervision of the proof-reading of the volumes of the first series—an important department of the work and one upon which he has been engaged for a number of years.

Apart from the selection of material, no work has been done on the volumes of Series III and IV during the year. The index of the maps and plans has been completed, and the preparation of an index of places mentioned in each volume of the several series has been commenced.

To continue the publication of the volumes during the current fiscal year \$100,000 was appropriated by the act of March 2, 1889. This sum will be expended as follows:

Printing and binding ten books, at an average cost of \$6,500 each.....	\$65,000
Stereotyping, proof-reading, etc., of six books, at an average cost of \$4,000 each.....	24,000
Stereotyping of ten indexes, at \$350 each	3,500
Salaries of two commissioners, at \$3,500 each	7,000
Contingencies	500
	<hr/>
	100,000

To carry on the work at the rate of expedition required by the act of March 2, 1889, it will be necessary that at least eighteen volumes should be printed during the current year. Of this number ten have been provided for. For the publication of eight more, \$50,000 will be required, and an estimate for that amount has been submitted. During the fiscal year ending June 30, 1891, \$200,000 will be required to enable the work of publication to be continued at the rate established by the act of March 2, 1889.

Respectfully submitted.

GEO. B. DAVIS,

Major and Judge-Advocate, U. S. Army.

LESLIE J. PERRY, *Member.*

J. W. KIRKLEY, *Member.*

REPORT OF THE BOARD OF VISITORS TO THE UNITED STATES MILITARY ACADEMY.

BOARD OF VISITORS, JUNE, 1889.

APPOINTED BY THE PRESIDENT OF THE UNITED STATES.

1. General LEW WALLACE (*President*).....CRAWFORDSVILLE, INDIANA.
2. Rev. ARTHUR EDWARDS, D. D. (*Secretary*).....CHICAGO, ILLINOIS.
3. Prof. LEROY D. BROWN.....RENO, NEVADA.
4. Rev. B. W. CHIDLAW, D. D. (*Vice-President*).....CLEVES, OHIO.
5. NATHAN S. LINCOLN, M. D.....WASHINGTON, DISTRICT OF COLUMBIA.
6. Prof. C. M. PINKERTON.....PERRY, IOWA.
7. Capt. CHARLES KING, U. S. Army, retired.....MILWAUKEE, WISCONSIN.

APPOINTED BY THE PRESIDENT OF THE SENATE.

8. Hon. CUSHMAN K. DAVIS.....ST. PAUL, MINNESOTA.
9. Hon. JOHN W. DANIEL.....LYNCHBURGH, VIRGINIA.

APPOINTED BY THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

10. Hon. S. M. ROBERTSON.....BATON ROUGE, LOUISIANA.
11. Hon. GEORGE W. STEELE*.....MARION, INDIANA.
12. Hon. S. S. YODER.....LIMA, OHIO.

To the Secretary of War, the President of the Senate, and the Speaker of the House of Representatives :

The following report of the Board of Visitors to the United States Military Academy at West Point for 1889 is respectfully submitted.

The Revised Statutes of the United States provide as follows :

SEC. 1327. There shall be appointed every year, in the following manner, a Board of Visitors to attend the annual examination of the Academy. Seven persons shall be appointed by the President, and two Senators and three members of the House of Representatives shall be designated as visitors by the Vice-President or the President *pro tempore* of the Senate and the Speaker of the House of Representatives, respectively, at the session of Congress next preceding such examination.

SEC. 1328. It shall be the duty of the Board of Visitors to inquire into the actual state of the discipline, instructions, police administration, fiscal affairs, and other concerns of the Academy. The visitors appointed by the President shall report thereon to the Secretary of War, for the information of Congress, at the commencement of the session next succeeding such examination, and the Senators and Representatives designated as visitors shall report to Congress, within twenty days after the meeting of the session next succeeding the time of their appointment, their action as such visitors, with their views and recommendations concerning the Academy.

SEC. 1329. No compensation shall be made to the members of such Board beyond the payment of their expenses for board and lodging while at the Academy, and an allowance, not exceeding eight cents a mile, for traveling, by the shortest mail-route, from their respective homes to the Academy, and thence to their homes.

A subsequent act, approved March 3, 1877, making appropriations for the Academy for the year ending June 30, 1878, explains that—

The expenses allowed by section thirteen hundred and twenty-nine of the Revised Statutes shall be paid as follows: Each member of the Board of Visitors shall receive not exceeding eight cents per mile for each mile traveled, by the most direct route, from his residence to West Point and return, and shall, in addition, receive five dollars per day for expenses during each day of his service at West Point.

In accordance with these provisions of the law relating thereto, the following Board of Visitors was duly appointed, and requested to convene at the Military Academy on or before Saturday, June 1 1889:

* Not present.

APPOINTED BY THE PRESIDENT OF THE UNITED STATES.

1. General Lew Wallace.....Crawfordsville, Ind.
2. Rev. Arthur Edwards, D. D.....Chicago, Ill.
3. Prof. LeRoy D. Brown.....Reno, Nev.
4. Rev. B. W. Chidlaw, D. D.....Cleves, Ohio.
5. Dr. Nathan S. Lincoln.....Washington, D. C.
6. Prof. C. M. Pinkerton.....Perry, Iowa.
7. Capt. Charles King, U. S. Army, retired.....Milwaukee, Wis.

APPOINTED BY THE PRESIDENT OF THE SENATE.

8. Hon. Cushman K. Davis.....St. Paul, Minn.
9. Hon. John W. Daniel.....Lynchburgh, Va.

APPOINTED BY THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

10. Hon. S. M. Robertson.....Baton Rouge, La.
11. Hon. George W. Steele.....Marion, Ind.
12. Hon. S. S. Yoder.....Lima, Ohio.

It being made known that a majority of this Board had arrived at West Point and were at the hotel, a meeting was called in the Board rooms Saturday evening, June 1. Inspection of the list of appointees showed that the following members were present: General Lew Wallace, Rev. Dr. Arthur Edwards, Prof. LeRoy D. Brown, Rev. Dr. B. W. Chidlaw, Nathan S. Lincoln, M. D., Prof. C. M. Pinkerton, Capt. Charles King, U. S. Army, retired, and Senator Daniel.

ORGANIZATION.

After general informal conversation respecting the coming duties of the Board, Senator Daniel nominated General Wallace as president, and Professor Pinkerton nominated Rev. Dr. Arthur Edwards as secretary, of the Board, and the two nominees were elected. By common and unanimous consent, Rev. Dr. Chidlaw was elected vice-president.

The secretary was instructed to invite General J. G. Parke, the Superintendent of the Military Academy, to visit the Board rooms, and to join in the informal conversation respecting the interests in his charge. Therefore General Parke came into the Board rooms and cheerfully tendered all possible assistance to facilitate the inspections and labors of the Visitors. The conversation tended greatly to render the initial work of the Board thorough and pleasant.

After this visit by the Superintendent, Captain King, Senator Daniel, and the secretary of the Board were appointed to report titles for the subcommittees, and to distribute work for the same.

Before adjournment each member of the Board was put in possession of a copy of the following:

ORDER OF EXAMINATIONS AND MILITARY EXERCISES.

[Orders No. 76.]

ORDERS No. 76.]

HEADQUARTERS U. S. MILITARY ACADEMY,
West Point, N. Y., May 15, 1889.

I. The annual examination will begin on Saturday, the 1st proximo, and continue daily, Sundays excepted, from 9 o'clock a. m. till 1 o'clock p. m., and from 2.30 o'clock p. m. till 4.30 o'clock p. m., until finished.

II. The Academic Board will be divided into two committees.

The first committee will be composed of—

The Professor of Natural and Experimental Philosophy,
The Professor of Mathematics,
The Professor of Civil and Military Engineering,
The Instructor of Ordnance and Gunnery, and
The Instructor of Practical Military Engineering.

The second committee will be composed of—

The Professor of Modern Languages,
The Professor of Chemistry, Mineralogy, and Geology,
The Professor of History, Geography, and Ethics,
The Professor of Law, and
The Commandant of Cadets.

The first committee will sit in the library and examine orally—

- (1) The third class in mathematics.
- (2) The first class in engineering.
- (3) The second class in natural and experimental philosophy.
- (4) The first class in ordnance and gunnery.

And by written examination—

The fourth class in mathematics, at 8 a. m., June 3, in Room No. 23, Academic building.

The second committee will sit in Room No. 1, Academic building, and examine orally—

- (1) The first class in law.
- (2) The second class in chemistry, mineralogy, and geology.
- (3) The third class in French.
- (4) The first class in Spanish.
- (5) The fourth class in French.

And by written examination—

The fourth class in French, at 8 a. m., June 1, in Room 23, Academic building.

The first class in Spanish, at 8 a. m., June 3, in the fencing academy.

The third class in French, at 8 a. m., June 4, in the fencing academy.

The fourth class in English, at 8 a. m., June 4, in Room 23, Academic building.

By inspection of marks and drawings—

The second and third classes in drawing.

In all the classes the oral examinations will begin with the lowest sections, and the examinations will be so conducted as not to interfere with the usual hours for meals of cadets.

The Superintendent will preside in either committee with which he may be present.

III. As each committee shall complete its labors of examination, its presiding officer will report the fact to these headquarters.

IV. First Lieut. Eugene J. Spencer, Corps of Engineers, and First Lieut. Alfred B. Jackson, Ninth Cavalry, are appointed the secretaries of the second and first committees, respectively. The record of each committee will be so kept as to show clearly the length of time occupied in examination by each department of instruction.

At the close of each day's proceedings the secretaries will report to the adjutant of the Academy the progress of the examination, and they will transmit to the secretary of the Academic Board the records of the proceedings of the committees as soon as they are completed.

V. The instructors will report daily to the heads of their respective departments, and keep themselves informed as to the times when their services will be required.

VI. The following military exercises will take place during the examination :

Exercise.	Subject.	Date.
Infantry	Review	June 3
	School of battalion	June 5
	Battalion skirmish drill	June 8
Artillery	Mortar battery drill	June 1
	Light battery drill	June 10
	Sea-coast battery drill	June 6
Cavalry	School of the company and battalion	June 4
	School of the soldier, mounted	June 7
Practical military engineering ..	Spar bridge building	June 10
	Ponton bridge building	June 8
	Military signaling	June 11
Small arms	Use of the sword and bayonet	June 11
	Military gymnastics	June 11

This order of exercises may be changed on account of the weather, or for other causes.

VII. The members of the First Class will be graduated June 12, 1889.

By order of Colonel Parke.

W. C. BROWN,
First Lieutenant First Cavalry, Adjutant.

At the second session of the Board, Chairman King reported the following titles for the subcommittees, and the president of the Board assigned members to the same, all having arrived save Hon. George W. Steele, of Indiana, who remained absent, and was present in the board at none of its sessions, the gentleman being detained by sickness:

SUBCOMMITTEES OF THE BOARD.

1. *On buildings, grounds, and police administration.*—Hon. S. M. Robertson, chairman; Hon. S. S. Yoder, General Lew Wallace, and Dr. Nathan S. Lincoln.

2. *On discipline and instruction.*—Capt. Charles King, chairman; Rev. Dr. B. W. Chidlaw, Hon. S. M. Robertson, and Prof. LeRoy D. Brown.

3. *On ordnance, armament, and equipment.*—Hon. John W. Daniel, chairman; Hon. Cushman K. Davis, Hon. George W. Steele, and Capt. Charles King.

4. *On cadet supply departments and expenditures.*—Prof. LeRoy D. Brown, chairman; Rev. Dr. Arthur Edwards, General Lew Wallace, Rev. Dr. B. W. Chidlaw, and Hon. John W. Daniel.

5. *On fiscal affairs of the Academy.*—Hon. Cushman K. Davis, chairman; Prof. LeRoy D. Brown, Hon. S. S. Yoder, and Prof. C. M. Pinkerton.

6. *On appointments, examinations, and miscellaneous business.*—Prof. C. M. Pinkerton, chairman; Dr. Nathan S. Lincoln, Rev. Dr. Arthur Edwards, and Hon. S. S. Yoder.

Meantime, according to instructions by the Board, the secretary had formally informed the Superintendent of the Academy that the Board had been organized. That officer immediately responded by letter, promising that every facility would be given to enable the Board to prosecute its inquiries and inspections. The Superintendent further said that he had instructed the heads of departments also to give all facilities to the Board and each of its members in their work. Still further to facilitate the work of the Board, Lieut. F. L. Dodds, of the Ninth Infantry, and Lieut. Henry O. Hodges, jr., of the Twenty-second Infantry, were detailed to attend upon the Board during their stay at the Academy. These gentlemen rendered courteous and thoughtful service, which is hereby acknowledged thankfully. General Parke, in the letter above alluded to, informed the Board that he, with his academic board and his military staff, would call at the hotel at 4.20 p. m., June 3, for the purpose of paying their respects to the Board and to conduct its members to the parade ground to witness a review of the corps of cadets to be given in its honor.

The call was duly made, and after the interchange of courtesies, a salute of seventeen guns was fired as the Board was being escorted to the parade ground. The president of the Board acted as reviewing officer and the parade and inspection took place with special credit to the splendid cadet corps that formed the perfect lines and columns.

Before leaving the Board rooms, it was ordered that the daily sessions should take place at 10 o'clock a. m. until otherwise directed.

At the fifth session a communication was received in which the Superintendent of the Military Academy requested the Board to select one of its members to address the graduating class on Wednesday, June 12. The Board accordingly selected Senator C. K. Davis to perform that service, which appointment was accepted by the Senator.

The duties of the Board as a body were performed within the first twelve days of June, and the interest culminated on the last day of that

period. Setting aside the chronological order of events, we here testify that "graduating day" was duly observed, according to the following order of exercises:

U. S. MILITARY ACADEMY.

Programme of the graduatiny exercises, at 10.30 o'clock a. m., Wednesday, June 12, 1889.

1. The graduating class will proceed to the designated place, escorted by the corps of cadets, under the commandant of cadets.
2. Prayer by chaplain of the Academy.
3. Music: United States Military Academy Band.
4. Address to graduating class: Hon. Cushman K. Davis, Board of Visitors.
5. Music: United States Military Academy Band.
6. Delivery of diplomas: General Sherman.
7. Music: United States Military Academy Band.
8. Benediction by chaplain of the Academy.

The address delivered by Senator Davis was as follows, its printing being ordered by the Board of Visitors:

SENATOR DAVIS'S ADDRESS.

GENTLEMEN OF THE GRADUATING CLASS: The graduation of a class from the school of youth into the university of active life is everywhere a most important event. It is the act by which new forces are set to work upon all the concerns of society and government. All of the agencies of civilization receive thereby a re-enforcement. This new auxiliary becomes immediately pervasive. Law, divinity, medicine, metaphysics, moral science, physical science, all philosophy, move under its impulse. Knowledge and power, its co-ordinate, are thus not merely kept at their former level; they are raised permanently the world over to a higher plane. It is the immaterial which is indestructible and immortal, and while the "cloud-capped towers and gorgeous palaces fade like an insubstantial pageant" and "leave not a rack behind," the edifices of knowledge endure as "possessions unto eternity."

It is the appreciation, often unconscious, of these facts which arouses such general interest in occasions like this. It is not alone mere curiosity or affection which at this time of the year draws such multitudes to attend the graduation ceremonies of institutions of learning. These are something more than scholastic pageants. The people feel that they come to assist in a process by which the state is made more secure, by which all learning is to be increased, by which morality is to be bettered, by which the very comforts of life are to be made more plentiful, by which that great achievement of man which we call civilization is to be augmented.

The Military Academy is highly appreciated by the American people. It is thoroughly an institution of the people and for the people. The system of competitive examinations by which, in many districts, the candidates for admission are chosen, places the youth of the country on a perfect equality. The son of the wage-earner has an equal opportunity with the son of the capitalist. These candidates are subjected to the same discipline after admission. The system is such that wealth gives its possessor no advantages of luxury or display.

There is no institution in the land in which is so thoroughly enforced that principle of all of our liberties that "all men are created equal." Many of you will rise to the most important grades of military rank. This will be through merit as demonstrated by achievement. No blatant demagoguery will assist the undeserving to these stations. The divinity of war is just and his rewards are strictly apportioned to merit. His ears are deaf to the restless and unscrupulous agitator whose tongue of sophistry teaches the people vain things to their undoing. The distinctions of the life to which you have dedicated yourselves will come from merit, first ascertained here, and, in the years to come, still further to be demonstrated by increase of experience and of knowledge coupled with the performance of professional and patriotic duty.

Of course any graduate from any institution of learning expects a career of some kind. In nearly all academic institutions this is a matter that is fixed after graduation. His diploma does not demonstrate that he is fit for any particular profession. Years elapse of subsequent education before he is deemed qualified to be intrusted with the duties of his chosen vocation. Years of endeavor may demonstrate that,

after all, he has mistaken his calling, and then is presented the disheartening spectacle of a man wasted in one profession who perhaps could have succeeded brilliantly in another.

No institution is infallible, and it is barely possible that an incompetent soldier may be graduated from this Academy. But the chance that this may be so is reduced to a minimum. The rigid discipline, the exact performance required in studies, the inflexible rule which turns back into civil life the man who fails in these, give assurance that the graduates are competent for the military profession. Into that profession you enter immediately. Not for any of you are those delightful years between youth and mature manhood in which other men, while acquiring their profession or waiting for employment, lay hold of the sweetest enjoyments of life. Not for any of you that golden time when the romantic dreams of early youth are all but realized; when in the leisure that is not idleness the mind is filled with trophies won from the domain of literature, or gathered from the observation of foreign travel. Scarcely for any of you is the power to change your career. Other men are free to wait. Your duties begin now.

These thoughts give rise to some important reflections. The course of study which you have just finished is necessarily special in its nature. It is designed to qualify you for one line of action. To do this in the course of time allotted it has been necessary to make your studies exclusive in their character to a very great degree. What has been taught bears upon military science, and the collateral information imparted has necessarily been limited. You are to a certain extent specialists, nearly to the same degree with a class of young men who have been instructed almost exclusively in the art and practice of medicine for a corresponding time. There is probably no institution in the world that sends forth its young men with a better special equipment.

But you must bear in mind that this special perfection has been accomplished by dispensing with instructions which pupils in institutions of a more general scope receive as a necessary portion of the course. And this is what was meant in the opening of this address by the expression that you are graduating from the school of youth into the university of life. This ceremony is but your matriculation into a grander school even than this, the school of experience, of thought inspiring action, and above all the school of the study of books. Do not abuse yourselves with the hallucination that in the way of education you are finished men. For general and ultimate purposes the boy who graduates from the university to-day is better equipped than you are at present, although you far surpass him in your special equipment for immediate action. The point of the difference between you is that he will probably pass several years of comparative leisure and further preparation before he goes seriously to work, while you must go to your life duty at once. He has thus considerable advantage over you in the way of opportunity, and yet I am inclined to think that your responsibilities through life will probably be much greater than his.

Under these circumstances what is your duty to yourselves and to your country? It is manifestly to set to work to round out your education in those departments of knowledge which from necessity you have not as yet been permitted to enter. Of course, if you are content to pass your lives as mere subalterns, to know just enough to perform well a subaltern's duty, to take slow promotion as it comes and lazily qualify yourselves for it when it happens, to live the life of a mercenary, these reflections will be wasted upon you. But I can not believe from what I have seen of you and from what I know of the aspiring spirit of the American youth in every situation, that you have any such conceptions of your own future. Every male child born in the United States is an heir-apparent to the Presidency. All the honors which intellect, knowledge, and patriotism can claim are his. The dream of Napoleon has been brought to pass, "let every career be open to talent." The one-sided man is badly equipped even for his own profession. In all the universe of knowledge there is not one element that does not bear upon and assist every other. This is as true of the military art as of any other profession. It was the great strength of Napoleon that he knew many things and knew them well. It is impossible to understand how that marvelous man, the graduate of a military school, passing thence, a mere boy, immediately into the most active life of warfare ever led by man, traversing with the blazing arc of conquest from the sacred places of Palestine to the snows of Russia, acquired that stock of general knowledge which he possessed and put to use. From his juristic conceptions sprang the Code Napoleon. He was a great financier. He was a profound diplomatist. His views upon education were far in advance of his age, and he made his knowledge of literature the solace of his exile.

The ultimate support of all governments is force. Whether we believe with Hobbes that man in a state of nature is necessarily in perpetual war and that government has its origin in subjection by physical means, or with Rousseau that in some golden age of primeval peace men came together and consented by contract to government, it is written that the first man born into the world killed the next born, and that every nation whose history is recorded began by victory in some war and preserved its nationality by repeated conflicts.

Our own Government was thus founded. This was not done by any declaration of independence, but by the sword. On the hallowed ground where we stand to-day, stood Washington, Greene, Putnam, La Fayette, and the other heroes of the Revolution, in arms and not in civil council. Here were matured the plans by which treason was thwarted, by which campaigns were fought in the Carolinas, in Virginia, in Pennsylvania, and in New York. It was to this place that the eyes of our ancestors were turned with hopes and fears to see in the soldier the assurance of freedom and of the success of the cause of self-government which had lain disowned and buried ever since the overthrow of the ancient republics. Had force failed here of what avail were all the fine declarations of the rights of man? But it did not fail. Through sorrow, alternate defeat and victory to final triumphs, the cause of the people was made triumphant by the sword, and Liberty, queen of a nation, stood, in all her glories and virgin beauty, regnant and equal among kings.

Many years rolled by and force again became necessary to preserve what force had thus established. One section of the nation rose in rebellion. A great war shook the continent like an earthquake. The farmer left his field, the lawyer his office, the student his desk, not to seek the "bubble reputation at the cannon's mouth," but each to fight, and if need be to lay down his life, for the sacred cause of his country. For four years the tide of battle rolled from south to north, from north to south, from mountain ridges into plains, down rivers whose placid breasts had never been stained by blood. Hundreds of thousands of gallant men clad in blue or gray went down into the valley of the shadow as to a festival never to return any more, and there they lie embattled in those impregnable ranks of death which no martial music can ever wake again, or charge of hostile armies break. The end came with conquest. Peace brooded over the land like a divine spirit. The desire for national dissolution has become as obsolete as the desire for the reunion with Great Britain. Sixty millions of people live together in amity. There are no wars or rumors of war. The bird nests in the cannon's mouth, and this nation, twice established by the sword, is moving forward, under the providence of God, to an appointed destiny of grandeur and permanence far exceeding that of any contemporary, or of any of those ancient monarchies the wide arch of whose "ranged" empire has fallen into ruin.

The soldiers who secured our independence founded this institution. The soldiers whom this institution graduated were foremost among the chieftains who preserved this nation. Sacred forever be their memories! Through all time may the American youth receive into their heart of hearts the full conception of the example of Washington, Greene, Putnam, Grant, Sherman, Sheridan, and their companions in arms. History will reverently gather their ashes into her everlasting urn, and the land they saved will be one shrine to their memory.

While it is true that states are founded and preserved by force, it is also true that this action of military power ought to be infrequent. That nation is not far from dissolution or from loss of its liberties in which armed force is a thing of universal constant employment, or even of constant exhibition. It is the most decisive attestation of the permanency of our institutions that one can travel across the continent and not see a single soldier. A standing army of less than twenty-five thousand men in a nation of sixty millions of people is a thing unprecedented in any annals. The dissolution into civil life, at the close of the late war, of the greatest armies ever marshaled by any civilized state, without outbreak, without one effort by any chieftain to continue his military power, was a spectacle equally unprecedented. These men returned from a system of education in the rude school of war which immeasurably broadened their conceptions of the greatness of their country and of the blessings of its institutions. Sentiments of State fealty which had been parochial in their narrowness and which had dwarfed patriotism were swept away by the realization that for us there is but one country, one flag, and one national government. In other words, the people taught themselves the supremacy of the national law.

What the citizen soldier thus taught himself it is your duty to remember. You are soldiers, but above all you are citizens. The authority with which you are dressed is subordinate to the civil law, of which you are but the chosen champion and protector. There is not a justice of the peace in the land who, within his jurisdiction, is not your superior officer. You are part of the civil government. To conceive yourselves otherwise is to make you outlaws. You will obey orders, of course, but the competent and patriotic officer gives no illegal orders.

And here applies in a very forcible manner the suggestion which I have made that your education has but begun, and that it is your duty to perfect it in all those branches to which your duties may pertain. I have a friend in the Army, an officer, and not of high rank, whom I regard as one of the first publicists in all my acquaintance. I have often been struck in my conversations with General Sherman with his complete conception of the supremacy of the civil government. The regard of General Grant for law was a leading feature of his character. Andrew Jackson, after his victory at New Orleans, appeared before an incompetent and wrong-headed United States judge and paid his fine of \$1,000 for contempt of court.

To this subordination of military power and rank to law the history of the last year affords an impressive contrast in another republic. A soldier of some reputation, of great self-assertion, of many pretensions, of doubtful ability, and of singular powers of fascination, suddenly acquired great popularity with the French people. Using his military prestige as his basis, he demanded what he termed great political and constitutional reforms of the civil government. Every dethroned dynasty at once looked upon him with hope. His intimate followers regarded him as the coming Napoleon. So dangerous does General Boulanger become that all the powers of the Government are employed in resistance to the political schemes of this single officer. Deprived of his military command, he is elected to the French legislature. The wily adventurer persists in his attacks upon established order. He is accused of a capital offense before the civil tribunals. He flees to Belgium, and from Brussels pulls the wires of his plot. Expelled from that kingdom, he takes refuge in London, and there perseveres in his intrigues. Vain would be the hopes of the people in you if you were taught anything here which could cause you to imitate this worst of all examples. Vain will be the hopes of the people in you if you fail to learn that your military training is but a portion of your equipment as citizens; if you fail to make it a principle of your conduct that your duty is to preserve the established civil government; if you fail by study and reflection to make these principles the very essence of your mental and moral organizations.

This is not the occasion to prescribe even the most general course of study. I can only advise you to pay particular attention to the civil history of this Government from the beginning. You will find this in its most attractive form in the biographies of the great statesmen who have shaped our domestic and foreign policies.

Learn thoroughly the principle that this is a Government of checks and balances; of Departments, executive, legislative, and judicial, co-operative and yet independent, and that it is profanation for any member of one of these to invade the precincts of the others. You will see in the course of these researches (they need not be extensive, and they can not be tiresome) with what prophetic wisdom our fathers constructed this glorious Constitution under which we have grown to be a nation exceeding great. It was made for three millions of people and for the region which lies east of the Alleghenies. Its panoply now engirds sixty millions of citizens. It contains a power of expansion which has adapted it to stupendous territorial acquisitions. We acquired from France a greater and more valuable domain than our ancestors wrested from Great Britain by the war of the Revolution. We bought Florida of Spain. We annexed Texas. We conquered and held a large portion of Mexico. We bought Alaska of Russia. The young Republic which lay between the eastern mountain slope and the sea, looked beyond the western horizon which girt him in, and, with a genius and power of acquisition greater than that of the Roman or the Spaniard, rose with the might of conquest, crossed the continent, established subsidiary republics in new States, clamped his possessions with the railways, those unbroken bands of iron; forced the activities and industries of the Atlantic slope down mighty rivers to the Gulf, and also overland into the bosom of the vast and solemn Pacific, and stands prepared to grasp the commerce of ancient Asia. With all this went the Constitution of the United States, not like a foreign system transplanted and imposed, but like the sky itself, covering all, and expanding continually before the path of this marvelous progress.

In all this the armies of the United States have performed a great part, and is it not well, young gentlemen, that you should profoundly investigate and thoroughly know the perfection of the scheme of government which made this possible?

But I will not detain you longer. We bid you hail and farewell, with the hope that in your career all the virtues of the citizen and the soldier may receive from each of you a brilliant illustration.

General W. T. Sherman delivered the diplomas of the Academy to the graduating class, after uttering one of his inimitable speeches. Those who received diplomas are as follows, the names being given in order of general merit:

First class—49 members—graduated June 12, 1889.

Order of general merit.	Names.	State.		Date of admission.	Age at date of admission.		Order of merit in—								Demerit for the two years ending May 31, 1889.
		Born in—	Appointed from—		Civil and military engineering.	Law.	History.	Spanish.	Ordnance and gunnery.	Discipline.					
											Years.	Months.			
*1	Winslow, Eben E.	D. C.	Mass.	June 14, 1885	19	1	1	2	1	1	1	1	1	0	
*2	D'Armit, Albert M.	Pa.	Iowa.	Sept. 1, 1885	20	9	2	3	2	5	2	5	11	11	
*3	Flagler, Clement A. F.	Ga.	Iowa.	June 14, 1885	17	9	4	7	4	4	3	27	85	10	
*4	Harding, Chester	Miss.	Ala.	do	18	5	3	19	27	24	14	4	10	85	
*5	Harts, William W.	Ill.	Ill.	Sept. 1, 1885	19	0	8	10	8	14	11	20	60	60	
6	McGregor, Robert.	Mich.	Mich.	June 14, 1885	20	5	5	11	21	33	9	1	0	0	
7	Blake, Edmund M.	S. C.	N. C.	do	19	5	10	14	7	12	8	1	0	0	
8	Martin, John T.	Ohio.	Ohio.	do	19	5	7	12	6	21	4	1	0	0	
9	Wilcox, Francis W.	Tenn.	Tenn.	do	17	9	20	8	9	29	13	23	73	73	
10	Ellis, Wilmot E.	N. J.	N. J.	do	17	9	22	6	10	11	16	34	201	201	
11	Kenly, William L., jr.	Md.	Md.	Sept. 1, 1885	21	6	9	35	48	19	22	18	57	57	
12	Haan, William G.	Ind.	Ind.	June 14, 1885	21	8	6	29	41	44	5	21	64	64	
13	Jordan, Sidney S.	N. J.	N. J.	Sept. 1, 1885	17	7	17	15	12	16	6	3	4	4	
14	Bethel, Walter	Ohio.	Ohio.	June 14, 1885	18	6	15	9	15	7	7	2	1	1	
15	Sydenham, Alvin H.	Iowa.	Neb.	Sept. 1, 1885	18	2	11	26	20	6	28	25	80	80	
16	Johnson, Ben.	Miss.	Miss.	June 14, 1885	19	1	13	30	32	45	12	19	58	58	
17	Barroll, Morris K.	Md.	Md.	do	19	5	23	20	17	27	17	1	0	0	
18	Harrison, Ralph	Mo.	Mo.	do	18	2	21	4	13	15	18	22	67	67	
19	Skerrett, Delamere	Ohio.	N. Y.	do	19	4	14	31	22	30	15	35	211	211	
20	McGlachlin, Edward F., jr.	Wis.	Wis.	do	17	0	18	21	23	26	26	17	55	55	
21	Campbell, Archibald	Pa.	N. Y.	do	19	10	45	45	16	9	25	30	105	105	
22	Hains, John P.	Pa.	At large.	do	19	9	19	48	43	46	33	31	144	144	
23	Lassiter, William	Va.	Va.	do	17	8	25	5	11	10	10	28	89	89	
24	Irwin, George LeR.	Mich.	Ill.	Sept. 1, 1885	17	4	34	1	3	13	20	7	17	17	
25	Hagadorn, Charles B.	N. Y.	N. Y.	June 14, 1885	19	3	12	38	47	41	36	13	43	43	
26	Rhodes, Charles D.	Ohio.	Ohio.	do	20	4	41	23	19	22	27	1	0	0	
27	Lee, Harry R.	R. I.	R. I.	do	19	2	35	27	25	8	40	14	46	46	
28	Bookmiller, Edwin V.	Ohio.	Ohio.	do	17	8	27	18	5	18	21	1	0	0	
29	Piper, Alexander R.	N. Y.	Idaho.	do	20	3	28	37	48	43	23	7	17	17	
30	Winston, Eddie T.	Tenn.	Tenn.	June 15, 1884	20	5	37	40	40	23	39	8	20	20	
31	Wood, Winthrop S.	D. C.	Me.	June 14, 1885	19	9	26	25	31	32	29	26	81	81	
32	Langhorne, George T.	Ky.	Va.	Sept. 1, 1885	18	1	24	28	29	37	37	33	198	198	
33	Kemp, Ulysses G.	Ohio.	Ohio.	June 14, 1885	18	5	31	32	49	2	48	8	20	20	
34	Peterson, Matt R.	N. C.	N. C.	do	18	10	40	17	18	25	24	3	4	4	
35	Cole, Edwin T.	Md.	Pa.	Sept. 1, 1885	19	1	29	24	24	28	19	10	23	23	
36	Phillips, William A.	Texas.	Tenn.	do	19	3	16	46	44	48	34	24	77	77	
37	Taylor, John R. M.	D. C.	At large.	June 14, 1885	20	5	33	39	26	38	42	28	89	89	
38	Kirkman, George W.	Texas.	Ill.	June 15, 1884	17	4	36	16	14	20	41	36	312	312	
39	Lacey, Francis E.	W. Va.	Mich.	June 14, 1885	17	3	38	19	37	40	31	49	58	58	
40	Cloman, Sidney A.	Ohio.	Ohio.	do	17	8	32	36	35	39	30	11	27	27	
41	Crawford, Charles	Ohio.	Kans.	do	18	5	43	22	28	36	43	3	4	4	
42	Graves, William S.	Texas.	Texas.	June 15, 1884	19	2	30	42	38	42	32	7	17	17	
43	Webster, Frank D.	Mo.	Mo.	June 14, 1885	18	9	47	49	45	35	46	9	21	21	
44	Leitch, Joseph D.	Mich.	Neb.	June 15, 1884	20	4	42	33	39	47	45	16	50	50	
45	Burkhardt, Samuel, jr.	Ill.	Ill.	June 14, 1885	19	9	39	34	33	31	44	12	30	30	
46	Normoye, James E.	Mich.	Ill.	June 15, 1884	18	3	46	47	42	34	38	6	14	14	
47	Stockham, Edward V.	N. J.	N. J.	June 14, 1885	21	7	44	44	36	49	35	15	48	48	
48	Barrios, Antonio	Guatemala.	Guatemala.	Mar. 26, 1884	18	2	48	43	30	3	49	32	188	188	

Mr. Barrios received his instruction as a cadet under the provisions of a joint resolution of Congress approved June 17, 1885. Mr. Charles Young, of Ohio, has since received his diploma as a member of the graduating class, he having "made up his deficiency in engineering to the satisfaction of the Academic Board before the 1st of September, 1889."

At the sixth session of the Board, the secretary, Dr. Arthur Edwards, was appointed to write the report of the Board, and, prior to publication, to send proofs to each member of the Board for revision and approval. That duty has been performed, and this report appears according to the specified plan.

At the eighth session of the Board, General Wallace read a paper of his own, setting forth his suggestions concerning proposed changes respecting education both in the Army and at the Academy at West Point.

GENERAL WALLACE'S PAPER.

To the Board of Visitors:

GENTLEMEN: One can not say the Academy at West Point is above criticism; yet its courses of instruction do challenge the highest respect. And, when, in addition, the discipline, *esprit de corps*, and deportment acquired in the brief term of cadetship are considered, then, saying nothing of its history, respect for the institution rises to a degree of admiration.

THE SYSTEM OUGHT TO BE APPLIED TO THE WHOLE ARMY.

The undersigned is not disposed to stop with the above judgment. The very excellences of the institution compel me to look beyond the Academy, and insist that the system underlying all its good results should be extended to the whole army of the United States.

REASONS FOR THE EXTENSION.

1. The Academy at West Point was founded in 1808, when the population of the country was about 5,000,000. The population is now quite 65,000,000, while the total of graduates this year will be forty-nine. The inadequacy is self-apparent. General Grant said the number of cadets ought to be raised to one thousand. The opinion of the wisest soldier of his day leaves little room for debate, except as to how the addition should be made, and to what extent.

2. It is very remarkable that of a people martial in spirit as any in the world the youth most desirable for soldiers can not be induced in the present status of the Army to enter its ranks. Of the many reasons for this circumstance one must be given—as a rule, enlistment is the end of social standing. To cure the evil, every inducement to become a cadet—certainty of advanced education, hope of commissions, elevation socially—should be offered.

3. The amazing facts, (1) that there were 12,177 trials by general and inferior courts-martial during the year ending September 30, 1888; (2) that the increase of trials by inferior courts-martial in 1885 over trials by like courts in 1887 was 1,041; * (3) that of desertions there are on the rolls, waiting action, between 40,000 and 45,000; (4) that public opinion, if it does not actually justify desertion, refuses to condemn it, tell unerringly of an excess of unfit men in the Army, and that the excess is so great as to demand of Congress a speedy and thorough reform. Will a simple increase of cadets at West Point accomplish the purpose?

A better belief is that there can be no sufficient reform which does not make the service honorable to a private soldier; in proof of which every citizen interested in the subject is invited to a study of this Academy.

IS THE EXTENSION PRACTICABLE?

The proposition is not to multiply West Points, but simply to extend the system of education and discipline at present governing in the Academy to the whole army. In that particular every fixed post in the country now or hereafter to be established might be converted into a military academy. To deny the proposition is to assert that text-books, blackboards, chalk, and pens and ink are a monopoly, and that this Academy exhausts the total of our young men apt for war. Then, as to instructors, we have been patient witnesses of the examinations of the first class this year, and have seen officers, themselves graduates, serving as teachers and examiners; and while their proficiency charmed us, we were unable to detect the slightest friction between instructor and pupil, or loss of respect on the one side or failure of sympathetic interest on the other. The conclusion is that the company officer is the true instructor for his men.

Indeed, given the right kind of men, if an officer should protest against the duty, he should be suspected of incapacity, and at once disposed of by retirement.

ESSENTIALS TO THE RE-ESTABLISHMENT.

It ought not to be difficult to draft an act of Congress for the re-establishment of the army upon this line. No more ought one to look for perfection of the system except as, in course of time, the suggestions of experience present themselves for trial; yet it may not harm the general idea to mention some points of apparent need to it.

(1) Enlistments by State quotas upon the basis of population.

* The figures are from the official report of the Judge-Advocate-General to the Secretary of War for 1888.

- (2) Citizenship.
- (3) Examinations preliminary to enlistment similar to those prevalent in the Academy for admission, including proofs of good character.
- (4) A term of enlistment for five years.
- (5) Courses of education similar to those now prevalent in the Academy.
- (6) Company officers personal instructors of their men.
- (7) Age for enlistment not less than eighteen nor more than twenty-two.
- (8) Recitation rooms, text-books, and appliances for practice and illustration of studies provided by Government for every military post.
- (9) Fixed hours of study and for recitations by each enlisted man not in arrest or on a duty making their observance impossible.
- (10) Heavy penalties for humiliating personal treatment of enlisted men by officers, such as subjecting them to menial service, or to manual labor not strictly within the limit of honorable duty.
- (11) Selections of a limited number (say three hundred or five hundred) of enlisted men at the end of their fourth year of service for transfer to West Point, there to undergo a course of final instruction extending through the fifth year: the selection to be from the entire body of fourth year men according to merit, determinable by established equitable rules.
- (12) Honorable discharge at the end of the fourth year of service of all enlisted men not chosen for the final course at the Academy, together with ineligibility for their re-enlistment in time of peace.
- (13) Commissions to fill vacancies in the lowest grade at the end of the academical or fifth year issuable to the men who prove themselves of the best standing and greatest general proficiency; all other modes of original appointment to the Army to be abolished. Seniority to govern promotions in time of peace.
- (14) The men who fail of appointment at the end of the fifth year to receive diplomas in lieu of commissions, and be discharged from the service.

RESULTS OF THE SYSTEM.

Giving three officers to each company of one hundred men, a calculation, upon the hypothesis of an annual discharge of three thousand soldiers, can be easily made of the supply of commissioned officers furnishable by the new system. In a marvelously short period there would be officers ready-made for a million men. In the next place the popular dream of a democratic army is nonsense. Discipline implies despotism. It is not idle, however, to talk of an army democratic in personnel and sentiment. The retraiçy of educated soldiers into the walks of civil life would, it is believed, accomplish this end. Certainly the present system does not contribute to it.

WEST POINT.

The foregoing is not aimed as a blow at West Point. If one thinks otherwise, the reply ought to suffice that the Army of the United States is not a toy kept for the amusement of anybody.

If this paper, submitted for consideration as a recommendation, should not meet the views of the Board, it may find favor enough to cause its embodiment in the formal report as a communication.

Very respectfully,

LEW. WALLACE,
President of the Board of Visitors, etc.

It will thus be seen that General Wallace proposes for our Army a system of schools which will call for an examination touching the common branches, like that in the Military Academy, failure to be followed by rejection. In other words, the system of selection designed contemplates a degree of proficiency in the common branches as a condition of enlistment. General Wallace's paper was heard with much interest, but at his special request no action was taken and no recommendations were made. The General gave as a reason for his request that the reform proposed is extremely radical, and time should be given to fairly consider it before it is either adopted or rejected. The Board voted that the paper should be made a part of this report.

At this same session a communication was received asking the chairman of the Board to formally present to the Academy portraits of Gen-

erals Grant, Sherman, and Sheridan, which, by the liberality of Hon. G. W. Childs, of Philadelphia, had been ordered and purchased, to adorn the cadets' mess, known as Grant Hall. It was found impossible to make this presentation a part of the graduation exercises, and after correspondence with Mr. Childs' representative, it was agreed to defer the presentation to some future but early date.* The portraits were, however, placed in position in Grant Hall, to await the formal presentation.

At the ninth session of the Board a communication was received from General Parke containing an extract from a letter to him written by Hon. Redfield Proctor, the Secretary of War. Mr. Proctor's message was as follows:

LETTER FROM SECRETARY PROCTOR.

PROCTOR, VT., June 10, 1889.

MY DEAR GENERAL: I was called home again from Washington on Friday by the continued dangerous illness of my son. I hoped until this morning that he might be so that I could go to West Point to-morrow afternoon and be with you Wednesday. If he improves so that I can, I will telegraph you to-morrow, but it does not now look probable.

I can not express my regret at being deprived of the opportunity to be present at the closing exercises of the year.

In behalf of the President let me thank the Board of Visitors for their attendance and services, and assure them that any recommendations they may make will be the subject of earnest and favorable consideration.

Please inform them and also your associates of my regret that I can not meet with you on Wednesday.

Very truly, yours,

REDFIELD PROCTOR.

GENERAL PARKE,

Superintendent of the Military Academy.

The reading of this kindly letter was received very gratefully and cordially by the Board of Visitors.

At this same session it was resolved to authorize General Wallace, Captain King, Dr. Edwards, and such other members as might prefer to remain after the graduating exercises and witness the reception and examination of cadet candidates and to see the encampment of the cadets. This authorization contemplated the duty of a report on the subjects involved, the same to be included in the general report of the Board.

At this session also the subcommittees filed their reports, and the secretary was authorized to edit, adjust, and print the same as parts of the general report. The following resolution was passed unanimously and a copy was ordered to be sent to the Superintendent of the Academy:

Whereas the Board of Visitors to the United States Military Academy for the year 1889 have been the recipients of many courtesies from the Superintendent and other officers of the Academy: Therefore

Resolved, That the thanks of this Board be, and are hereby, tendered to said officers for the courtesies and attentions which they have shown the Board as a body and as individuals.

The resolution was duly forwarded, and General Parke gracefully responded in a cordial note in which he said that "in behalf of the Academic Board and all officers of the Academy, I beg leave to tender our heartfelt thanks for this mark of appreciation of service rendered and duty performed."

* The presentation took place October 3, 1889, with appropriate and interesting ceremonies.—*Secretary B. V.*

The following resolution was passed unanimously, and it was ordered that after being signed by the president and secretary of the Board, it should be forwarded to the President of the United States:

Resolved, That in view of the extraordinary usefulness of Capt. W. F. Spurgin, as cadet Quartermaster and Commissary, the President of the United States be, and hereby is, respectfully requested to order that Captain Spurgin be retained in his position at the Academy, if not inconsistent with the interests of the service.

IN GENERAL, AS TO BOARD SESSIONS.

The Board, as will be seen, held nine sessions as a body, and gave much other time to special sessions of the subcommittees, besides making thorough and repeated inspections of the departments assigned to the six subcommittees among which the work was distributed. This writer assumes to say that the Government never has had, as to its intent, a more pains-taking, thorough, and industrious Board. It has pleased some facetious parties to represent the average Board as but perfunctory, junketing "visitors" in the ordinary sense of that word. The Board did not include a man who would be willing to give his time to a useless service. The Board is almost the sole means of communication between this nursery of officers and the people from among whom the cadets came but yesterday. It is noticeable that recommendations of former Boards have been realized in the main in the most liberal sense. The letter from the Secretary of War already quoted will suggest to the candid reader the fact that the services of the Board are not considered to be in any just sense merely perfunctory, or a useless feature of the graduating season. Inspection of the reports of visitors for the past half dozen years—all of them able, thorough, and suggestive, and some of them real marvels of efficient labor and thought—show that the said reports contain recommendations respecting vital changes and improvements involving immense expenditures of money, which recommendations later took tangible shape in subsequent legislation and liberal appropriations by the Congress of the United States. The Board for 1-89 looked into all departments as one jocular observer said, "from garret to cellar."

PLAN OF THIS REPORT.

The plan of this report does not contemplate a rapid survey of the several topics distributed among the six subcommittees, and the relegation of the subreports and tables to an appendix where they will be overlooked, or at least appear to bear an obscure relation to the main subjects which will be discussed in the following pages. Each topic will be treated separately, and all documents relating thereto will be printed in their proper places, in close relation to the reports of the several six subcommittees. The preferable plan will thus render unnecessary the usual perplexing and confusing appendix.

I.—BUILDINGS, GROUNDS, AND POLICE ADMINISTRATION.

On Buildings, Grounds, and Police Administration.—Hon. S. M. Robertson, chairman; Hon. S. S. Yoder, General Lew Wallace, and Dr. Nathan S. Lincoln.

The various photogravure views printed in this report suggest but faintly and inadequately the fact that the United States Military Academy is located on one of the most picturesque points, on the banks of one of the most beautiful rivers on the planet. Nature has done her most

to make the place attractive, and the hand of man has gratefully accepted and tastefully adorned the spot, as if to make thankful acknowledgment of the bounty of The Creator. As far as the "grounds" are concerned, they suggest the obligatory provision of symmetrical, sightly, and adequate "buildings," just as the marvelous beauty of the King's daughter imply jewels and garments worthy of her bridal and her dowry.

About 2,400 matchless acres, made up of the original site and of subsequent purchases, include every aspect of cultivated plain, towering mountain, swelling hill, and secluded glen. Almost impassable mountains on the north and west, the Hudson River on the east, and an easily controllable area of 225 acres on the south, recently purchased from the Kinsley estate, shut in this village of scholars, the fruits of whose knowledge and personal service are dedicated to the Republic. Our country cares not to invite or employ the mere soldier of fortune whose mercenary sword is drawn indifferently for the cause that pays him most. She prefers to choose her cadets from among the children of the people, and, selecting the best, to train them by her own chosen methods and trusted teachers. Here, in an atmosphere which savors of war, but War only for the sake of Peace, the Republic shapes her embryo army leaders who study war only that they may defeat those who aim to defile our traditions of scholarly peace and prosperous commerce. The place and the scene are worthy of the aims of the Government and of a peaceful people who dream not of conquest but desire solely to repulse the ambitions of intruding foes. Battle and siege are not the trades of American soldiers, save as conserving forces. West Point is not a frowning fortress, but rather a peaceful area, too valuable for a farm, and too beautiful for earth-works and bastions, save for the historic outlines of revolutionary forts which are preserved as mementoes of the war in which noble men gave their lives to build a home for Liberty.

Many fine buildings are worthy of the worthy site. The barracks are solid, comfortable, and adequate. Erected some time ago, they lack some modern features which are named in the subreport presently to be quoted. The hospital for cadets is substantial and modern. Though far too large for habitual use, it is wisely designed to meet the demands of a conceivable emergency. "Grant Hall," used for a cadets mess, is ample, and three times a day is like a home where plenty is spread, and in most cases a greater plenty and better than in the original homes of the cadets. The library is barely adequate, and will demand attention at some early date, as will the chapel also, which should be sufficient to contain thrice as many persons, particularly when inhospitable weather forbids the assembling of a crowd at commencement times. Provisions have been made for a new academic building and gymnasium, and other improvements will follow in due time. As much as has been done, and as much money as has been appropriated and expended for buildings, still more should be voted willingly and without stint. We have but one military school, and but one school for the Navy, whereas other nations have several. Great Britain has her Royal College at Woolwich to train her artillery and engineer officers; one other at Sandhurst to train her infantry and cavalry officers, and her staff college at Sandhurst, besides about seven other military schools for various other branches of the land service. France has her various military schools at Paris, St. Cyr, Fontainebleau, Saumur, La Fleche, and elsewhere. Prussia has her eight schools at Erfurt, Potsdam, Neisse, Engers, Cassel, Hanover, Anclam, and Metz, besides the War Academy at Berlin, her senior cadet school at Berlin, and six other cadet schools as pre-

paratory to the senior one named. To these are to be added half a dozen others for various departments which sustain the reputation and efficiency of that wonderful German army. Austria, Russia, Spain, and Italy, and other powers are bountifully supplied with their fine warlike nurseries. The United States, if they do not care to follow these European hints, can well afford to build up and sustain our one and only cadet Military Academy to the highest point of efficiency, as a hint to all the world that if we are not eager for war, we are, therefore, all the more able to arm a half million men quickly, and, if need be, give leaders to this host, and to still larger hosts who shall be second to none in the highest arts of honorable and scientific war. At any rate, our Government may accept a hint from examples in civil life and from those who are giving about two millions a year as free gifts to the schools that train our citizen youth in the arts of peace. It is a matter of record that the free gifts of the people to their schools within the past decade are more than the entire cost of West Point since Washington, Hamilton, and Knox, and others laid the foundations of the Military Academy. Of course, these free gifts are from the many and for the benefit of the many, but there have been times and there may be other times when in a just sense the material interests of all civil and military life may depend on the timely preparations made at the hands of those who have been trained at West Point and Annapolis. Many citizen officers in our various wars have acquitted themselves grandly, but we do not recall a single instance in which the independent leadership of our armies has been committed to any one not educated at the Military Academy. The only exceptions to this statement apply to those who served before we had any Academy. Even in those cases, the very heroes who led our patriotic armies were the first to suggest that we should immediately ordain one to supply their own conscious deficiencies of training in theory and practice.

The Government has done well and liberally, but, as in duty bound, this Board again points out some of the details with respect to which early and liberal action is requested.

* * * * *

PHYSICAL CONDITIONS.

The cadet must have a sound body to contain whatever mind he has. He must be neither "lame, halt, nor blind." The three distinguished surgeons, Drs. Heger, Skinner, and Merrill, who were ordered to West Point this year, as a special board according to law, to examine cadet candidates, performed that duty thoroughly, as the writer of this general report of the Board of Visitors can testify. One hundred and thirty-nine were thus examined in June and fifty-six in September. Of these, fourteen were rejected in June and eleven in September. That is to say, of the total of one hundred and ninety-five thus examined a total of about twenty-five were rejected for physical reasons, or nearly 15 per cent.

The surgeons properly hold that a candidate is, or is not, qualified in body. There is no middle ground. The writer of this report will not soon forget the disappointment of some of the rejected candidates. One who passed last year physically but was then rejected as to scholarship, returned this year with great confidence. Being stripped for the ordeal as to his body, he was rejected at a glance, varicocoele having developed during the past year. This young man might have been saved the expense of the trip to West Point, could an Army surgeon have made

the most casual prior examination. His family physician might have done him the service, but an Army surgeon's verdict would have been conclusive. It is our opinion that a cadet candidate should have the privilege of applying for a preliminary examination at the recruiting station for the Army nearest to his home. These skilled Army surgeons know the precise tests applied to recruits for the Army, and are sure to know whether or not a young man can pass physically the precisely identical tests applied at West Point. The right of appeal to the Academy surgeons should remain. The recruiting surgeon should not be allowed to reject the candidate finally, but his presumptive and tentative verdict might be of value to the not rich family which can not well afford the expenses of a fruitless long journey to West Point. A candidate may conceivably be "conditioned" as to studies, but there can be no "condition" respecting organic disease of the heart, color-blindness, varicocele, or defective sight or hearing, or other disabling defects.

The district from which a candidate has been appointed has a right to demand that he must be perfectly sound in body, since there may be a score or two of others thoroughly sound ready to pass the most rigid tests. The same is true respecting the academic tests. A circular addressed to West Point candidates remarks as follows as to the double tests applied to all would-be cadets. It were well if all would consent to be guided thereby.

Every candidate is subjected to a rigid physical examination, and if there are found to exist in him any of the following causes for disqualification to such a degree as would immediately, or at no very distant period, impair his efficiency, he is rejected:

(1) Feeble constitution and muscular tenuity; unsound health from whatever cause; indications of former disease; glandular swellings, or other symptoms of scrofula.

(2) Chronic cutaneous affections, especially of the scalp.

(3) Severe injuries of the bones of the head; convulsions.

(4) Impaired vision from whatever cause; inflammatory affections of the eyelids; immobility or irregularity of the iris; fistula lachrymalis, etc.

(5) Deafness; copious discharge from the ears.

(6) Loss of many teeth, or the teeth generally unsound.

(7) Impediment of speech.

(8) Want of due capacity of the chest, and any other indication of a liability to a pulmonic disease.

(9) Impaired or inadequate efficiency of one or both of the superior extremities on account of fractures, especially of the clavicle, contraction of a joint, extenuation, deformity, etc.

(10) An unusual excurvature or incurvature of the spine.

(11) Hernia.

(12) A varicose state of the veins of the scrotum or spermatic cord (when large), sarcocele, hydrocele, hemorrhoids, fistulas.

(13) Impaired or inadequate efficiency of one or both of the inferior extremities on account of varicose veins, fractures, malformation (flat feet, etc.), lameness, contraction, unequal length, bunions, overlying or supernumerary toes, etc.

(14) Ulcers, or unsound cicatrices of ulcers likely to break out afresh.

There being no provision whatever for the payment of the traveling expenses of either accepted or rejected candidates for admission, no candidate should fail to provide himself in advance with the means of returning to his home, in case of his rejection before either of the examining boards, as he may otherwise be put to considerable trouble, inconvenience, and even suffering on account of his destitute condition. If admitted, the money brought by him to meet such a contingency can be deposited with the treasurer on account of his equipment as a cadet, or returned to his friends.

It is suggested to all candidates for admission to the Military Academy that, before leaving their place of residence for West Point, they should cause themselves to be thoroughly examined by a competent physician, and by a teacher or instructor in good standing. By such an examination any *serious* physical disqualification or deficiency in mental preparation would be revealed, and the candidate probably spared the expense and trouble of a useless journey and the mortification of rejection.

It should be understood that the informal examination herein recommended is solely for the convenience and benefit of the candidate himself, and can in no manner affect the decisions of the Academic and Medical Examining Boards at West Point.

We promise to candidates the most rigid physical examinations. They will be stripped and investigated from the crown of their heads to the soles of their feet. They will be tested inside and outside. Teeth, hair, scalp, eye, nose, mouth, lungs, heart, arms, fingers, legs, toes, joints, veins, and every accessible organ and function will be searched for organic or functional infirmity. With this in view, we advise all candidates to secure a thorough examination at home both as to physical and academic tests, just as the above circular suggests. No candidate should expect any discrimination in his favor in either regard, for he will not and should not receive it. That discrimination would defraud the many who have a right to compete for the place. If by any method an appointed candidate secures the place, he should be held closely and impartially to the conditions. No one has any right to the place. He who receives an appointment to appear to undergo the tests, must undergo them in every particular.

TIME OF APPOINTMENT.

The Board of Visitors holds that the law governing the time of appointments should be more strictly construed and rigidly observed. It is required by law that candidates must be appointed one year in advance of their reception into the Academy, unless by death or otherwise a vacancy is caused which can not be provided for by such advance appointment. We direct attention to the argument made in the proceedings of the Academic Board, December 5, 1887, quoted above by the subcommittee, on this topic of appointments and examinations. The law provides that alternates also must be examined at the same time when their principals are examined, and that the former should be appointed, like their principals, as nearly a year in advance as is possible. Both should be appointed as the law directs.

TIME OF REPORTING FOR EXAMINATION.

The law prescribes that appointees shall be admitted under regulations made by the Secretary of War. The Secretary of War accordingly has expressly ordained that candidates must be examined in June, unless sickness or other unavoidable cause prevents that test in the month named. It is argued, correctly we believe, that it is not contemplated that there shall be a double opportunity in the same year to fill a given vacancy. At the same time it appears that another construction of the law is held by some, inasmuch as, for instance, of the forty-four examined in August, 1887, more than three-fourths were appointed as cadets after the June examinations of that year. These instances would seem to prove that the law requiring candidates to be appointed a year in advance is not strictly enforced, since it does not appear probable that death or other unavoidable causes could have justified so many post-June appointments.

It certainly does not appear just that candidates who have appeared for and have failed in the June examinations should be re-appointed and permitted to re-appear for examinations only two months later in the same year. The sickness named in the law has not robbed them of a June appearance; they certainly are not dead, and incompetence in June should not be reckoned or recognized as among the legal "unavoidable causes" at a time when so many other eligible young men are ready and competent to undergo the prescribed tests for admission in the month designated by law.

The evils of avoidable August examinations are brought into prominence in the light of the facts that in the decade ending in and includ-

ing the year 1887, about 20 per cent. of applicants failed academically in the June examinations, whereas of those who were examined in August, 38 per cent. failed to pass. The figures for this present year tell their own story and enforce their own lesson, as follows:

Of candidates in 1889, 139 were examined in June. Of these, 14 were rejected by the surgeons, leaving 125 for academic examination, in which latter tests 41 failed, or about 33 per cent. of the 125.

Of candidates in 1889, 56 were examined in August. Of these 11 were rejected by the surgeons, leaving 45 for academic examination, in which latter tests 28 failed, or about 63 per cent. of the 45.

Thus it will be seen that the candidate mortality as result of contact with the Academic Board was almost twice as great in September as it was in June. Incidentally we suggest that it is incredible that the Academic Board, refreshed as it is after its summer vacation, is more savage and exacting in September than it is in June. We have no doubt that the comparative figures expressing the relative academic rejections are conclusive proof that the preparation of candidates is twice as poor in September as it is in June. Granting that all might be admitted as result of both the June and September examinations, it is clear that the grade of scholarship in the Academy must decline. We recommend that emphasis stronger than ever before be put upon the legal requirements relating to the time for reporting for examinations in June and that none but unavoidable exceptions be tolerated.

Even if the candidate's preparations were as good in September as they are in June, instead of being twice as poor, there is an additional reason why the candidate should be at the Academy and ready to begin his work in June. The cogent additional reason is as follows:

The June admittees are kept busy by their exclusive military duties and novitiate as soldiers. Though utterly exempt from academic study, they are engrossed and absorbed, until after personal drill, "setting-up," and minute individual instruction, they are admitted into the corps for service on guard and police duty, battalion drill and parades, and guard-mounting. Those who enter in September are raw, awkward, undrilled, and profoundly ignorant of all that which has fully occupied the time of the June admittees during half of June, all of July, and all of August. The September comers must begin academic study with those who have been instructed in camp all summer, and it is wonderful that one-quarter of the "Seps." outlive the combined academic and military tests of the coming half year. These practical considerations make it appear certain that the law anticipated the direful double dangers of entrance in September, and therefore contemplated the admission of cadets in June as a rule, and provided entrance in September for the exceptional, unfavored, and belated comers. The Board, therefore, advises the stricter construction of the wise law, as but simple justice to the Academy, and to the competing, eager, and well-equipped, would-be candidates who are defrauded by the looser construction of regulations on the subject.

If, now, the September admittee is really below grade in preparation to enter the Academy, how fearfully he is handicapped in the race after entrance, and beneath the burden of his double duties. Little wonder that so many of the "Seps." ultimately fall out of the race and resign or are dismissed. When that distinguished officer and successful Superintendent, General Wesley Merritt, was in charge of the Academy, he said confidently, and correctly:

The records show that in nine cases out of ten cadets who are of doubtful proficiency at the January examination fail outright before the end of the second year's course; and in cases where cadets weak in their studies have been turned back to

resume the course after failure the first year, they seldom succeed in completing more than one step beyond the stage of their original failure. In other words, the first six months' course is a fair test of a youth's ability to succeed, and generally, if his position in his class is doubtful at this time, his deficiency is sure, sooner or later, to find him out.

That is to say, during the fifth month after the admission of the new September candidate, he is subjected to the examination which will determine whether or not he is to be promoted from the number of "candidates admitted" to take rank among "cadets appointed." The candidates examined in August for admission are tested in January, after they have been doing the double duty above sketched, and under very adverse circumstances. General Merritt says that nine out of ten who are of doubtful proficiency in January fail outright before the end of the second year. In the light of such testimony it would seem but simple justice to insist that not less than 90 per cent. of candidates shall appear for examination in June and not more than 10 per cent. in August. This Board directs attention to the fact that of the whole number examined this year, on the two occasions, after deducting those who were rejected on physical grounds, 33 per cent. were examined in August. It ought not so to be. It would seem that violations of law are increasing.

After this industrious but just discounting of September admissions, we cheerfully admit the excellence of the rare individual who succeeds in conquering all difficulties, and finally receives his diploma. We discuss simply the policy concerned, and after appending the names of those who were received in 1889, we wish them all possible success. The following is the list of candidates admitted this year, those names to which a star is prefixed belonging to the September admittees. All others were admitted in June:

List of cadets admitted in 1889.

Names.	Whence appointed.	Names.	Whence appointed.
Ames, Butler	Massachusetts.	Heiner, Gordon Graham	Pennsylvania.
Andrews, Lincoln Clarke	New York.	Heywood, Edwin Jerome	New Hampshire
*Arnold, Claude Sidney	Missouri.	Holther, Louis Jenson, jr.	Utah.
Babcock, Walter Crosby	Massachusetts.	Honey, Robertson	Rhode Island.
Bash, Louis Hermann	Illinois.	Houle, George Edmund	Massachusetts.
Bassette, Buell Burdett	Connecticut.	Howell, George Pierce	North Carolina.
Battle, John Somerville	North Carolina.	* Hunt, Ora Elmer	California.
Beattie, Herbert	Illinois.	Hyer, Benjamin Bremner	New York.
Bell, Edwin	New York.	Jamerson, George Hairston	Virginia.
Berkeley, Hugh Douglas	Mississippi.	Johnston, Robert Pulliam	North Carolina.
Beyer, Walter Fred.	Michigan.	Kilbourne, Lincoln Fay	At large.
* Brown, Allen Percy	Nebraska.	Kilburn, Dana Willis	Illinois.
Brown, William, jr.	Illinois.	King, David Matson	Ohio.
Carpenter, John Stewart	New Jersey.	Krouse, Harry Augustus	Pennsylvania.
Cassatt, Edward Buchanan	At large.	Kutz, Charles Willauer	Pennsylvania.
Clark, Elmer Wright	Iowa.	Laws, Albert	Maryland.
* Cochen, Frank Sherwood	New York.	Lawton, Frederick George	Mississippi.
* Cole, Secor Quick	New York.	Lawton, Louis Bowen	New York.
Colt, William Wesley	Illinois.	LeComte, Henry Charles	Switzerland.
* Connell, Thomas Walter	New York.	Lewellen, Emerson Calvin	Kansas.
Coppock, Wilson Clark	Ohio.	Mann, Fred Eugene	Wisconsin.
* Cox, Edwin Luther	Texas.	Martin, Amos H.	Pennsylvania.
Crosby, Herbert Ball	Illinois.	Mathews, James Davenport	Ohio.
Cruikshank, William Mackey	Dist. Columbia.	McKenna, Frank Bornemann	California.
Davenport, Joseph Andrews	Louisiana.	McLewee, William Beresford	New York.
Edwards, Arthur Morris	Nebraska.	McMann, George Henry	Iowa.
Farr, Otho Williard Burnham	Maine.	* Monroe, William Harrison	West Virginia.
* Forrer, Charles Daniel	Virginia.	Morgan, John	Ohio.
Geleerd, Myer	Ohio.	* Morgan, Robert Edmund Lee	Mississippi.
Graham, Malcolm Kintner	Texas.	Nelson, Hunter Bithal	Tennessee.
Guthrie, James Morris	Kentucky.	Parke, Francis Neal	Maryland.
Hart, Verling Kersey	Wyoming.	Pattison, Harry Howard	Indiana.
* Hartwick, Edward Edgar	Michigan.	Penick, Harry Otho	Iowa.
Hazzard, Samuel Chrisman	Pennsylvania.	Perry, Howard Rand	Illinois.

List of cadets admitted in 1889—Continued.

Names.	Whence appointed.	Names.	Whence appointed.
Pool, Solomon Clifton.....	North Carolina.	Taylor, Edward.....	Idaho.
Punch, Andrew Martin.....	Missouri.	Thrasher, Norman Samuel.....	New York.
Raymond, Robert Rossiter.....	New York.	* Timberlake, Edward Julius, jr.....	Tennessee.
Read, James Charles.....	Pennsylvania.	Urtecho, José Andrés.....	Nicaragua.
Rice, John Hodgen.....	Missouri.	Vidmer, George.....	Alabama.
Rogers, William Cauldwell.....	New York.	Waite, Harrison, jr.....	Virginia.
Sawtelle, Charles Greene, jr.....	At large.	Walker, Meriwether Lewis.....	Virginia.
Schindel, Samuel John Bayard.....	Pennsylvania.	Whipple, Allen Pugh.....	Georgia.
Shortz, Robert Packer.....	Pennsylvania.	Whitworth, Pegram.....	Louisiana.
Smedberg, William Renwick, jr.....	California.	* Williams, Andrew Erwin.....	Texas.
Smith, Hamil Allen.....	Georgia.	Wilson, Frank Edwin.....	Ohio.
Smith, Mathew Charles.....	Alabama.	* Wise, Hugh Douglas.....	At large.
* Smith, Thomas Allison.....	New Jersey.	* Wolfe, Orrin Rawson.....	Kansas.
Smith, Thomas Lee.....	Indiana.	Wood, Charles Drury.....	Tennessee.

Under joint resolution of Congress, Henry Charles LeComte, of Switzerland, and José Andrés Urtecho, of Nicaragua, appear in the above list.

APPOINTING CANDIDATES AND THEIR NUMBER.

The President is authorized to appoint candidates "at large," so that there may be ten cadets in the Military Academy thus appointed all the time. In other words, His Excellency appoints ten in each quadrennium. As a rule, these go to West Point to be tested for admission simply because they are so authorized. As one other rule, these appointees are sons or nephews of army officers.

This Board would gladly see the President of the United States invested with the authority to appoint ten cadets each year, and, in addition, to make a place at West Point for a stated sufficient number of army or navy officers' sons, the young men to be tested as usual. The subcommittee on this topic suggests that the governors of States be permitted to appoint one cadet each, so that the vacancies at West Point may be supplied; that is to say, abolished. We direct attention to the fact that Representatives in Congress are permitted to designate candidates only as a courtesy, since, in law, the power to appoint belongs to the President, and is exercised by the Secretary of War as the head of the War Bureau, under the President. Others have recommended that United States Senators have power to select rather than the governors.

We are content to leave this point in administration to Congress, with the expression of the hope that the recurring vacancies ought to be promptly filled.

At the same time, we direct attention to the fact that examinations sometimes result in rejecting both the principals and their alternate cadets from a given district while bright boys are passed triumphantly by the Academic Board, and it immediately appears that there is no vacancy to reward those competent and efficient candidates. That very contingency was realized six times in the June and once in the August examinations this year. This Board does not feel free to recommend that in such instances the President should be authorized to appoint the passed candidates and charge them up against the quota of States whose candidates have failed, but the successful, yet portionless, young men should be enabled to enter the Academy, on whose

rolls there are many vacancies. We heartily recommend that the President be allowed by law to appoint young men "at large" in such instances, and particularly when they exhibit exceptional ability and industry, these latter tests to be witnessed to the President by the Academic Board of the Academy at West Point.

Many members of this Board of Visitors give much respect to the well-known view of General Grant, who said that there should be at least one thousand cadets at West Point, only the better of the graduates to receive commissions in the Army. At any rate, the Board as such favors the filling of all vacancies, and some prefer the enlargement of the corps beyond that, allowing service in the Army after graduation to be voluntary on the part of the cadet.

There is an impression abroad that there are already more annual graduates from the Military Academy than vacancies in the Army to be filled. On this last point we cite the evidence to the contrary contained in a paper prepared by Lieutenant Simpson, who at our request has brought his figures down to date, for use in this report:

RELATIVE GRADUATES AND VACANCIES—NUMBER OF VACANCIES OCCURRING ANNUALLY IN THE ARMY THAT ARE OPEN TO GRADUATES OF THE MILITARY ACADEMY COMPARED TO NUMBER OF SUCH GRADUATES.

[Prepared by First Lieut. W. A. Simpson, Second Artillery.]

Below will be found a table showing the number of casualties, making, directly or indirectly, vacancies which the graduates of the Military Academy may be assigned to fill, and the number of such graduates for the last fourteen * years. The table does not cover a longer period, because, in 1871, there was completed a considerable reduction in the number of regiments in the Army, and its strength since has been nearly uniform.

The number of casualties, taken from the official Army Registers, has been obtained as follows:

First. By counting the actual number of casualties in the Corps of Engineers and line of the Army, and in those staff departments (Adjutant-General's, Inspector-General's, and Ordnance) in which vacancies are filled by appointment from the line, and excluding the Signal Corps, and the Medical, Quartermaster, Subsistence, and Pay Departments, as vacancies in these either can not or need not be filled by appointment from the line. In cases where vacancies in the latter have been filled from the line such vacancies have been counted.

Second. By counting the casualties on the retired list. As there are always more subjects for retirement than places for them on the list every vacancy on this list is soon filled by taking an officer from the active list. The retired list is open to the whole Army. The number of officers, vacancies among whom would cause vacancies among the second lieutenants of the line or Corps of Engineers is 1,830. The number of vacancies among whom would not do so, is 350. The proportion is, therefore, about 4.8 to 1. Supposing that retirement is equal in the different branches of the service, forty-eight officers of the former class go upon the retired list to ten of the latter, and therefore forty-eight fifti-eighths of the casualties on the retired list give rise to vacancies open to graduates, non-commissioned officers, and appointees from civil life.

The number of each graduating class is taken from the Official Military Academy Register of the corresponding year.

*Lieutenant Simpson has extended his tables so that their valuable figures apply to the years 1872 to 1889, inclusive.—[Note by secretary of Board of Visitors.]

1	2	3	4	5	6
Year.	Number of graduates in class corresponding to year.	Casualties causing vacancies available for graduates Military Academy.	Total number of casualties on the retired list.	Forty-eight fifty-eighths of preceding column.	Sum of columns 3 and 5, giving total number of casualties providing vacancies for graduates.
1872	57	60	13	11	71
1873	41	69	9	7	76
1874	41	79	9	7	86
1875	43	47	9	8	55
1876	48	57	13	11	68
1877	76	64	10	8	72
1878	43	53	6	5	58
1879	66	25	5	4	29
1880	52	37	9	7	44
1881	53	44	12	10	54
1882	37	51	12	10	61
1883	52	47	23	20	67
1884	37	44	13	10	54
1885	39	37	21	18	55
1886	77	40	23	19	59
1887	64	36	22	18	54
1888	44	30	23	19	49
1889	48	36	19	16	52
Total	918	856	251	208	1,064
Yearly average...	51	.....	.....	.....	59

Comparing columns 2 and 6, we see that the average number of vacancies annually exceeds by eight the average number of graduates.

It will be forever impossible to compute the influence and value of the infiltration into American social and business life of numbers of young men educated at West Point. The habits there formed and the definite scholarship acquired make the graduate a marked man. Unlike as in almost all other countries, these graduates are not dissimilar from their fellows educated in citizen schools. The distribution of such graduates among the people give the latter more knowledge of and sympathy with the Military Academy. It is not generally known that the Naval Academy at Annapolis has not expected to find places in our Navy for all graduates, but after certain examinations diplomas are granted, and some of the graduates have been relegated to citizen life, after payment to them of about \$1,000 each.

The full valuation of such graduates from the Military and Naval Academies, in case of unavoidable, sudden war is, of course, impossible. Such a war may prove to be unavoidable, even though it may be one of the closing series to precede the abolition of all wars among nations sensible and humane enough to arbitrate their differences. At the same time, it may appear that such a reign of common sense and enlightened humanity is be the fruit of our manifest readiness to take the field against whatever foe. The exercise of good conscience often has its substantial basis and correlative in palpable, solid muscle owned by some one whom it is not entirely safe to insult or wise to strike. Arbitration has its antithesis in powder and steel, and our enemies may feel it more convenient to reason together with those who may not be conveniently swallowed or partitioned. At any rate, we, as a nation, will probably not cease to be interested in the latest tactics, and to continue investigation into military subjects, as well as into peaceful navigation and thrifty commerce. We will continue to train our theoretical soldiers, and it may be thought best even to increase their number at West Point. We recommend that at least all vacancies be filled, and the Academy outfitted as this report recommends.

SELECTING CANDIDATES BY COMPETITION.

Examination for admission is as important to scholarship in the graduated cadet as spring planting is to autumnal harvests. How shall the best would-be candidate be identified and selected from among those who ought not to be at West Point as the nation's chosen and invited pupils?

We have reason to approve the method of selecting candidates by competitive examinations, in all cases conditioning that approval on the rigid proviso of honest competition. We condemn and reject the use of the strategic competitive method when employed to discharge a Congressman from responsibility to his constituents, and at the same time with the understanding that whosoever excels, a previously and privately designated favorite shall receive the appointment.

There are two modes of selecting. One is by the "direct" method of appointment and the other by competition.

By comparisons, it has been determined that during a period of about fourteen consecutive years, of cadets who were selected by competition, 63 per cent. graduated at West Point, while of cadets selected directly, without competition, only 37 per cent. graduated.

As to the special point affecting entrance to this Academy, it has been ascertained by comparison extending over a dozen consecutive years, that of candidates selected by competition, 79 per cent. passed the entrance examination at West Point, while of those directly appointed, without competition, 60 per cent. passed the corresponding entrance examination at West Point. While thus favoring competition under just conditions, we prefer that the competitive examination papers should be prepared by the Academic Board at West Point, since even examination papers for use in that competition should be correlated to the tests to which the candidate will later be subjected at West Point. As the board named will shape the finished product in the Academy, it would seem that it should have its hand on the raw material from the very beginning, provided always, of course, that this initial influence shall shape only the tests for all candidates, and shall not affect in the slightest degree the personal selection of the individual candidate. One of the practical difficulties in this suggestion is the danger that the examination papers thus prepared at West Point may be seen in advance by those who compete in said competition. It is scarcely too much to assume that honorable gentlemen and cadet candidates will be far above and beyond such temptations in the respect named. At all events, the home competition should be fair, and far removed from possibility of favoritism. We again emphasize the recommendation, in the circular quoted above, respecting some rigid home tests as to the academic and physical qualifications of the would-be cadet.

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REPORT

OF

THE SECRETARY OF THE NAVY.

NAVY DEPARTMENT,
November 30, 1889.

To the President:

The effective force of the United States Navy, when all the ships now authorized are completed, excluding those which by the process of decay and the operation of law will by that date have been condemned, will comprise 11 armored vessels, of which only three are battle-ships, and 31 unarmored vessels, making a total of 42.

The following statement shows the number of war vessels on the effective list of the principal foreign powers, built, building, or projected, at the present time, and exclusive of sailing and practice ships:

Country	Armored.	Unarmored.	Total.
England.....	76	291	367
France.....	57	203	260
Russia.....	49	119	168
Germany.....	40	65	105
Holland.....	24	70	94
Spain.....	12	78	90
Italy.....	19	67	86
Turkey.....	15	66	81
China.....	7	66	73
Sweden and Norway.....	20	44	64
Austria.....	12	44	56

The table shows that even when the present building program is completed, the United States can not take rank as a naval power.

The purpose for which the United States maintains a navy is not conquest, but defense. For reasons of economy and public policy, the force should be as small as is consistent with this object. But it appears from the above comparison, that with all the additions authorized by the legislation of the last seven years, the country, as far as its capacity for defense is concerned, will be absolutely at the mercy of states having less than one-tenth of its population, one-thirtieth of its wealth, and one-hundredth of its area. While the element of defensive strength is thus clearly deficient, the vulnerable points open to an

enemy's attack, and the interests liable at all times to injury, are numerous and important. A coast line of 13,000 miles upon which are situated more than twenty great centers of population, wealth, and commercial activity, wholly unprotected against modern weapons, affords an inviting object of attack, with a wide range of choice as to the points to be selected. Any one of the powers named could, without serious difficulty, even after the completion of our fleet as now authorized, secure in a single raid upon our coast, an amount of money sufficient to meet the expenses of a naval war; an amount, one-half of which, if judiciously expended over a series of years, would be sufficient to afford this country a guaranty of perpetual peace.

The defense of the United States absolutely requires the creation of a fighting force. So far the increase has been mainly in the direction of unarmored cruisers. These vessels, while useful in deterring commercial states from aggression and as an auxiliary to secure celerity and efficiency in larger operations, do not constitute a fighting force, even when it is intended exclusively for defense. To meet the attack of ironclads, ironclads are indispensable. To carry on even a defensive war with any hope of success we must have armored battle-ships. The capture or destruction of two or three dozen or two or three score of merchant vessels is not going to prevent a fleet of ironclads from shelling our cities or exacting as the price of exemption a contribution that would pay for their lost merchantmen ten times over. We must do more than this. We must have the force to raise blockades, which are almost as disastrous to commercial cities as bombardment. We must have a fleet of battle-ships that will beat off the enemy's fleet on its approach, for it is not to be tolerated that the United States, with its population, its revenue, and its trade, is to submit to attack upon the threshold of its harbors. Finally, we must be able to divert an enemy's force from our coast by threatening his own, for a war, though defensive in principle, may be conducted most effectively by being offensive in its operations.

If the country is to have a navy at all, it should have one that is sufficient for the complete and ample protection of its coast in time of war. If we are to stop short of this, we might better stop where we are, and abandon all claim to influence and control upon the sea. It is idle to spend our money in building small, slow-going steamers, that are unnecessary in peace and useless for war. It is little better than a repetition of the mistaken policy that prevailed in our early history, of building gunboats that were laid up or sold as soon as war broke out. The country needs a navy that will exempt it from war, but the only navy that will accomplish this is a navy that can wage war.

The policy of military aggrandizement is totally repugnant to American institutions, and is not likely ever to be entered upon. The present question has nothing to do with such a policy. It is a practical business question of insuring our property and our trade, in which the commercial cities of the coast, the ports on our lake frontier, and the centers of production in the interior are alike interested. The naval force before

the war, when the population numbered thirty millions, included ninety vessels of all classes. Before the completion of the present program, which will give a total of less than half that number, the population will have more than doubled, and the wealth on our coast subject to injury or destruction will have increased tenfold. The annual increase of wealth in this country is estimated to equal that of England, France, and Germany, and before it can create an effective navy its population is certain to exceed that of any two of these powers combined. Such a nation can not be indifferent to events taking place in close proximity to its own coasts, threatening the freedom of its commerce and the security of its sea-port cities. The questions that have arisen and that will continue to arise in the Gulf of Mexico and the Pacific concern the prosperity and development of the United States too closely to be further ignored, and our interests in these localities are too important to be left longer unprotected.

The cost of building a navy casts no perceptible burden upon a country of our vast resources. It is the premium paid by the United States for the insurance of its acquired wealth and its growing industries. Compared with the interests that are secured, the rate is low. It is a cheap price to pay for safety. We collect in duties in six months at a single port a greater sum than we could spend in building a new navy in six years. For the past two years the Government has paid its creditors for the privilege of discounting its debt before it was due twice the sum we have spent in reconstruction. And the fact must be remembered that of the amount which we spend for the construction of a ship, only a small fraction, perhaps one-tenth, goes for absolutely raw material, while the remaining nine-tenths represents, in one form or another, the earnings of American labor.

It is sometimes asserted that there need be no haste about building ships, upon the supposition that our reserve strength is sufficient to improvise a force in time of war. This is a fatal mistake. Naval wars in the future will be short and sharp. It is morally certain that they will be fought out to the end with the force available at the beginning. The nation that is ready to strike the first blow will gain an advantage which its antagonist can never offset, and inflict an injury from which he can never recover.

Under the most favorable circumstances, with the largest experience and the best mechanical appliances, the construction of war-ships takes a long time. In the United States much has been learned in the last eight years, and facilities have been greatly enlarged, but much still remains to be done, and a longer time is required here than in the ship-yards of Europe. The design and construction of the innumerable and complex details of a modern war-ship can not be hurried. There is no branch of mechanical art in which haste leads more certainly to wastefulness and imperfection. The limited capacity of our establishments, public and private, is a further cause of delay. If Congress were ready to-day to authorize the construction of all the ships that we need

it would be a mechanical impossibility for the country, with its present appliances, to furnish them within fifteen years; while the first six months of hostilities would not only see our exposed cities forced to submit to heavy contributions, but every ship-yard in the country, public or private, destroyed, and thus the last hope extinguished of creating a navy to meet the emergency of war.

THE NEW CRUISERS.

The new cruisers are eight in number, the *Chicago*, *Boston*, *Atlanta*, and *Dolphin*, contracted for in 1883, and the *Baltimore*, *Charleston*, *Yorktown*, and *Petrel*, contracted for in 1886 and 1887.

In looking back at the work of naval reconstruction, begun seven years ago, the country has reason to be congratulated on the success of the undertaking. The building of the first four ships was an experiment in a field hitherto untried in this country, but they have fully sustained the high reputation of American mechanics. In 1882, when these cruisers were designed, the Department was wholly without experience in the construction of modern war vessels. Nothing of the kind had been undertaken since 1874, and but little then. Boards and bureaus were without precise information as to progress abroad, and without the means of acquiring it.

Notwithstanding these difficulties, the results accomplished by the earliest cruisers compared favorably with those obtained by foreign ship-builders. In 1882 there were but eight war vessels in existence of less than 5,000 tons which were capable of making 16 knots. Our three earliest cruisers developed a mean speed of between 15 and 16 knots—the *Chicago*, 15.33; the *Atlanta*, 15.54, and the *Boston*, 15.58. The *Atlanta's* highest average for one hour was 16 knots, and the *Chicago's* 16.35, while the *Boston*, in her best run over the measured mile, on September 21, 1889, made 16.33. These figures put an end, fully and finally, to all controversies over the speed of the vessels. The *Boston* and *Atlanta* have made cruises, and their performance at sea shows that they are thoroughly stanch and seaworthy vessels in all weathers, and although it is possible that the world may have contained, at the time they were designed, a very few swifter cruisers, their high efficiency can no longer be called in question.

The record of the *Dolphin*, which vessel began with a speed of 15.11 knots on her contract trial, and which has recently returned from a cruise around the world, is not less satisfactory. The results of the inspection of the vessel, after she has been three years and nine months in commission, are reported by the Board of Inspection, under date of October 2, 1889, as follows:

The material used in the construction of this vessel, and the workmanship, speak well for the designers and the builders. Aside from the slight repairs to her bearings she is ready for another cruise. By the most liberal estimates the work in the construction department can be done inside of a month. This, the first of the new Navy, makes a splendid showing for structural strength, fine material, and good care.

Her captain reports that she can average 14 knots an hour for any length of time, and under favorable circumstances she can run 16 at sea.

In the course of her cruise the *Dolphin* has run 58,000 miles in twenty months, and has been under steam 9,000 hours. In this prolonged run she has been stopped for repairs but once, and then for only two hours. This performance is probably without a parallel in the history of naval vessels, and bears conclusive testimony to the high skill of American artisans and the excellence of their work. Nor is it the less remarkable, in view of the confident predictions with which, at the outset of her career, the official condemnation of the vessel was somewhat prematurely pronounced by expert and by inexpert judges.

It is therefore proved by the test of actual cruising that these first modern experiments of the Department have come close to the highest standard of speed which had been reached at the date of their design, and that in structural strength, endurance, and workmanship they are not inferior to anything now afloat.

In view of these facts, the extraordinary statement, put forth in the Secretary's report for 1886 and never afterwards corrected, that a comparison of these vessels with the *Esmeralda* and other foreign ships indicates "a simple abandonment on the part of the Department of any attempt to reach the conditions which should have been attained," must be set down as a mere flight of political rhetoric, absolutely without warrant or justification. If the Department requires any vindication from such a charge, its complete vindication is to be found in the vessels themselves.

At the very time when the first cruisers were being designed the Department took steps to supply its want of experience by the systematic acquisition of information as to naval progress abroad. The establishment of the Office of Naval Intelligence and the assignment of naval attachés to duty in Europe, both of which measures date from 1882, have been of incalculable assistance in the work of reconstruction; and it is proper to refer especially to the untiring and successful efforts of Commander F. E. Chadwick, the first attaché sent out, whose extraordinary ability and judgment during six years of difficult service in England and on the Continent have had a lasting influence upon naval development in this country. The results subsequently obtained have shown the wisdom of the policy adopted at the outset.

The importance of a knowledge of progress abroad was increased by the rapid strides which it made during this period. In 1882 the compound engine was the highest development of marine engineering in practice. The first successful example of the triple-expansion engine, that of the steam-ship *Aberdeen*, was designed about this time. Little progress was made in its application until 1884, and not until 1885 did its use become general, even in the merchant service. In that year the keels were laid of the first ships of war provided with triple-expansion engines. These were the English belted cruisers of the *Orlando* class, in which the new type of engine was substituted at the last moment, after tenders had been invited and awards made for the old or compound type.

Of this extraordinary development in ship and engine construction,

by which, between 1882 and 1885, the art was almost revolutionized, the attainment of high speed made practicable, and the STANDARD ADVANCED FROM 16 TO 20 KNOTS, the Department was thus able to reap the full benefit. The measures which had been previously taken kept it fully informed of the progress of naval science in Europe, while the completion of the experimental cruisers of 1882 enabled our constructors to study the practical application of the problem as they had never studied it before. Of the new cruisers which were started about this time, the designs of two, the *Baltimore* and the *Charleston*, came from abroad. They were provided with the latest foreign appliances, with the exception of the *Charleston*, whose engines, built from plans purchased in the latter part of 1885, were of the compound type. All the other vessels had triple-expansion engines.

Of these cruisers four have undergone their official trial—the *Baltimore*, *Charleston*, *Yorktown*, and *Petrel*.

The *Baltimore*, of 4,400 tons, showed at her first trial 8,977.88 horse-power, 19.57 knots average speed for four hours, and 20.2 knots speed during the best hour of the four. The horse-power marking a slight deficiency (22.12) below the contract requirement, the contractor, at his own request, was given another trial. The Department is glad to report that this trial has proved a brilliant success, the horse-power being somewhat in excess of the contract requirement, the average speed for four hours being 20.1, and the highest speed for one hour being 20.39. This result is unparalleled by any war ship of the *Baltimore's* displacement in the world.

In all respects the *Baltimore* has proved thoroughly satisfactory. An undue vibration about the fore-castle during the working of the engines has been remedied by heavier bracing, at inconsiderable cost. This temporary "structural weakness" was not the fault of the contractor, but of the plan. Material improvements were made in the ship's engines during the progress of construction, and she appears to-day a sound, strong, and well-built vessel, creditable to her builders alike in honest material and honest workmanship, and creditable no less to the administration of the Department which adopted the design and carried it to successful completion.

The *Charleston*, of 3,730 tons, shows 6,666.16 horse-power, 18.2 knots average speed for four hours, and 18.3 knots speed during the best hour of the four. The Japanese *Naniwa*, of 3,730 tons, built in England from the same designs, has made 7,650 horse-power and 18.9 knots average speed.

The *Yorktown*, of 1,700 tons, has developed 3,398.25 horse-power, 15.6 knots average speed, and 16.4 knots speed during the best hour of the four. At her subsequent steam trial, September 21, 1889, the speed obtained was 16.7. The English *Archer*, of 1,770 tons, has made 3,982 horse-power, and 17.2 knots. The *Racoon*, also English, of the same tonnage, shows 4,582 horse-power, and 17.6 knots. Both are the average results of a four-hours' trial.

The *Petrel*, of 870 tons displacement, has developed a mean speed of 11.55 knots, and a maximum speed for one hour of 12.85 knots. The English *Maggie*, of 805 tons, at her four-hours' trial in May last, showed a speed of 14.13 knots.

In reference to the very low average made by the *Petrel*, as compared not only with the *Maggie* but with the lower standard that prevailed in 1882, it should be stated that the trial was managed, as all such trials are, by the contractor. It being for the contractor's interest to get the best results, it is reasonable to suppose that he will take care to have all the circumstances such that the vessel will make the best possible showing. The ignorance or inexperience of the contractors, however, in the case of the *Petrel*, was such that the trial can not be regarded as a fair indication of what the vessel can do. The coal used was of bad quality and the firemen were without experience. In the four hours' trial the ship began with a collective horse-power of 1,473 and a speed of 14 knots, which ran down before the trial was over to a horse-power of 540 and a speed of 9.6. These figures prove conclusively that the results were caused, not by poor engines, but by poor engineering.

There is one foreign cruiser, not exactly corresponding in size to any of the four recently completed, which has surpassed all the results that our vessels, or any other vessels, have been able to attain. This is the Italian cruiser *Piemonte*, built by the Elswick Works in England, and recently completed and placed in commission. In size the *Piemonte* is intermediate between the *Yorktown* and *Charleston*, having a displacement of 2,500 tons. She has a protective steel deck and an armament of quick-firing guns. In a trial on May 14, 1889, she developed 13,000 horse-power and a speed, for an hour and a half, of 22 knots per hour. Her two runs over the measured mile showed an average speed of 22.3 knots. She is undoubtedly the fastest cruiser now afloat, as the *Esmeralda* was five years ago; and she bears to the new United States cruisers about the same relation in comparative speed that the *Esmeralda* did to the first three cruisers.

In reference to the speed results of the *Charleston*, *Yorktown*, and *Petrel*, it appears that among contemporary vessels of the same class abroad, some few may be found, as was the case with the cruisers of 1882, whose recorded trial shows a figure slightly in excess. Upon this point, it must be stated that, while the Department and the country should never be fully satisfied unless their new vessels actually equal the best results obtained elsewhere, the public must not be misled by the figures of the foreign trials. The contract trials in Europe are carried on by ship-builders of great experience, who understand much more fully than those in this country the way to get the highest attainable results out of the ship for a short time. Every detail is attended to that can contribute to this result, and the forcing of the engine is sometimes carried so far that, after it has shown its capabilities in the contractor's trial, and been accepted on the strength of that trial, it is found by its owners, when put to every-day use, to have become a

damaged article. From this misfortune we have so far been exempt, and we have good reason to be satisfied that it is so, even if our speed results are thereby rendered less sensational.

It is notorious that the fast war steamers abroad, of whose wonderful performances on contract trials we hear so much, rarely or never equal these results when put into actual service, and not infrequently commanding officers have been instructed not to attempt to obtain contractor's results for fear of further injury to the machinery. Thus the *Nanica* is reported to have made 18.9 knots at the contractor's trial, while the *Takachiho*, her sister ship, made only 17.88 on being tried by her Japanese purchasers. It is a noteworthy fact that most of our new vessels, namely, the *Baltimore*, *Chicago*, *Boston*, *Dolphin*, and *Yorktown*, have, at later trials, or in later service, beaten their own record on the contract trial; and it is equally a fact that the usual experience with European vessels is just the other way.

The net results of the Department's operations for the last seven years are more than satisfactory. The assaults made, with more audacity than judgment, upon the four experimental cruisers of 1882 have been met successfully by the performance of the vessels, and all doubts of their efficiency, if such doubts ever really existed, are laid at rest forever; while the four cruisers of 1886, assuming that the *Petrel* will eventually come up to the mark, in their advance over their predecessors, prove that both designers and constructors have kept themselves abreast of the extraordinary development in ship-building since the earlier cruisers were laid down, and have taken full advantage of the information and experience which they were enabled to acquire through the measures adopted at that time by the Navy Department.

INCREASE OF THE NAVY.

To stop now in the work of reconstruction, is to abandon everything we have gained. We have proved that at a time when war-ship construction had seemed almost a lost art in this country, American mechanics could create it anew and place the United States where it was seventy years ago, when the vessels of its Navy were the best of their class afloat. We have fostered and developed a branch of industry in America which may, if kept up, attract to itself no inconsiderable share of the profits that now go to ship-builders abroad. We have secured for our Navy a certain number of excellent and useful vessels of the unprotected cruiser type, at a fair and reasonable cost. We have thus laid a solid foundation. But we must not for a moment deceive ourselves by supposing that we have an effective Navy. We have two distinct and widely separated ocean frontiers to protect, and there is only one way in which they can be protected, namely, by two separate fleets of armored battle-ships, with coast-defense ships suitably distributed to cover the most exposed localities.

Of the great cities on the Atlantic, and of the long stretch of unprotected coast on the Gulf, from Key West to the Rio Grande, which is

faced by the territorial possessions of a multitude of foreign states, it is hardly necessary to speak at length. On the Pacific coast there are large and growing interests of vital importance, not only to that immediate neighborhood but to the whole country, throughout its length and breadth. Among the enterprising and rapidly growing cities which form the bulwarks of our commercial prosperity in that quarter, there are some, like Tacoma and Seattle, which it is physically impossible to protect by any land fortifications. To abandon these cities, defensible only by the Navy, to the possible attacks of an enemy, and to subject to needless risk this coast and the vast region which it borders, a region second in importance to no other part of the United States, is to be guilty of an almost criminal negligence.

The necessities of our vulnerable position therefore demand the immediate creation of two fleets of battle-ships, of which eight should be assigned to the Pacific and twelve to the Atlantic and Gulf. They must be the best of their class in four leading characteristics: armament, armor, structural strength, and speed. The last is nearly as essential to the battle-ship as it is to the cruiser. It may safely be assumed that, other things being equal, the battle-ship of the highest speed will as a rule be the victor in action, for she can choose her position and keep the enemy at a disadvantage. Not only must the speed of our battle-ships be high, but it must be uniformly high, for the speed of the fleet is regulated by that of the slowest vessel.

In addition to the battle-ships, the situation of the country requires at least twenty vessels for coast and harbor defense. These vessels, although restricted in their range of effectiveness, are necessary components of a naval force which has a sea-coast to defend. Their employment as floating fortresses requires that they should have a powerful battery and the heaviest of armor, combined with moderate draft. At the present time eight vessels of this type are under construction, five of which are reconstructed monitors.

The one problem now before the Government, in the matter of a naval policy, is to get these forty vessels built at the earliest possible moment. The steps necessary to their completion, namely, legislation, design, and construction, can not take less than five years in the case of each one. Unless the existing yards, public and private, are enlarged and restocked with plant, not more than eight could be built at one time, and the construction of the others would have to wait for the launching of the first. Using the utmost promptness, the ships most essential to efficient protection could not be supplied in less than twelve or fifteen years.

It is therefore recommended that the construction of eight armored vessels be authorized at the coming session; and that they be of the type of battle-ships rather than coast-defense ships; the former being more generally serviceable, and there being only three of them now in process of construction as against eight of the latter.

In reference to fast cruisers, all modern experience goes to show that they are essential adjuncts of an armored fleet, and the proportion of

three cruisers to one battle-ship is believed to be sound and reasonable. This would make the future navy consist of 20 battle-ships, 20 coast-defense ships, and 60 cruisers, or 100 vessels in all, which is believed to be a moderate estimate of the proper strength of the fleet. Of the 60 cruisers required, 31 are now built or authorized. For an increase in the number of cruisers, considered simply as auxiliaries to the fighting force of battle-ships, we may wisely wait until the latter are in process of construction.

It must be remembered, however, that cruisers have another and equally important function in the attack and defense of commerce. Any staunch vessel with a good coal capacity and the highest rate of speed, armed with a few rapid-firing guns, though built and used principally for commercial purposes, may by certain adaptations in her construction be made readily available for this form of warfare. The fast transatlantic liners, nationalized in foreign countries, but supported and maintained by American trade and American passengers—many of them, even, owned by American citizens—are a powerful factor in the naval force of the Governments whose flag they bear and at whose disposal they must place themselves in time of war.

It is a matter for serious consideration whether steps may not be taken towards the creation of such a fleet of specially adapted steamers of American construction, owned by American merchants, carrying the American flag, and capable, under well-defined conditions, of temporary incorporation in the American Navy. The advantages of such an arrangement, which enlarges the merchant marine and makes it at the same time self-protecting, are overwhelmingly great. The difficulty is that American capital will not be drawn into the enterprise unless it can be sure of specific compensation for the concessions which it makes to the Government, first, in the adaptation of its vessels to the latter's needs, and secondly, in the surrender of a privilege to use them when the exigency arises.

In the absence of such an arrangement the naval policy of the United States can not neglect to take account of the fleets of fast cruisers which foreign states maintain under the guise of passenger and merchant steamers. They constitute an auxiliary navy, and must be reckoned as a part of the naval force of the governments maintaining them. It is difficult to imagine a more effective commerce destroyer than the steam-ship *City of Paris*, armed with a battery of rapid-firing guns. She can steam over 21 knots an hour, and can average 19.9 knots from land to land across the Atlantic. No man-of-war could overtake her; no merchantman could escape her. A fleet of such cruisers would sweep an enemy's commerce from the ocean. This fact is well understood in Europe, and states that are unprovided with a convertible merchant fleet are preparing to meet the possible emergency by partly-protected cruisers that are substantially as fast as the *City of Paris*. Of this type the *Piemonte* is the latest development, and others equally fast are now building.

Our deficiency should be supplied either by a line of fast merchantmen, constructed with special reference to use in time of war, which will enable the Government to avail itself of their services at critical moments, or we should build a fleet of at least five first-class cruisers of the very highest rate of speed, certainly not less than 22 knots. The displacement of these vessels should not be less than 4,000 tons. Even such a fleet will not supply the want of swift merchant-steamers for coaling and transport service. Colliers and transports must alike be fast, for they can not fight; and the collier can take no chances of capture, for she carries the life of the fleet.

In determining the size of the smaller type of cruisers, one point is settled: All steel cruisers must be large enough to admit of a double bottom. A vessel like the *Yorktown*, which has but three-eighths of an inch of steel on her bottom, could hardly escape sinking if she touched a rock, no matter how lightly. Such a ship must not strike. She can not run any of the risks which the old-fashioned ships used to run every day with comparative safety, for a steel bottom will be penetrated where a wooden one would be merely scarred. Besides the *Yorktown*, we have the *Concord*, the *Bennington*, and the three 2,000-ton cruisers (Nos. 9, 10, and 11), which are marked by this defect. It is not well to add to the number.

In reference to the gun-boat class, any large increase in it must be condemned. This class is now represented by the *Petrel* and the two 1,000-ton vessels (gun-boats Nos. 5 and 6). To make any considerable addition to it is consuming the revenues of the Government without any proportionate benefit. It is chasing the shadow and losing the substance. Such vessels add nothing to the real strength of a naval force. A cruiser to be useful must be fast enough to overtake any merchantman and to escape from any more powerful ship of war. These vessels have neither the strength to fight nor the speed to run away. A limited number of 1,000-ton vessels can be utilized in certain special kinds of service on foreign stations, and for this particular purpose it is recommended that three such vessels be constructed. Any larger increase at the present time would be injudicious and wasteful.

Apart from the want of battle-ships the most marked defect of the present fleet is in torpedo-boats. The number of these boats owned by fifteen foreign States is as follows:

Country.	Torpedo-boats.	Country.	Torpedo-boats.
England	207	China	26
France	191	Denmark	22
Russia	138	Japan	21
Italy	128	Sweden and Norway	19
Germany	93	Holland	16
Austria	60	Spain	15
Greece	51	Brazil	15
Turkey	29		

The United States has one such boat under construction. This branch of defense can not safely be neglected any longer. It is high time that steps should be taken to supply these essential constituents of a naval force. I therefore recommend that the construction of at least five torpedo-boats of the first and second classes, in suitable proportions, be authorized, as a beginning, at the coming session of Congress.

PROGRESS OF RECENT CONSTRUCTION.

ARMORED VESSELS.

BATTLE SHIPS.

Name.	Keel laid.	Where built or building.	Displacement.	Estimated horsepower.	Cost.*	Date of completing building.	Remarks.
			Tons.				
Texas.....	1889	Navy-yard, Norfolk, Va.	6,814	8,600	\$2,500,000	Aug. 3, 1886..	Commenced; keel partly laid.
Maine	1888	Navy-yard, Brooklyn, N. Y.	6,648	9,000	2,500,000	...do	One-fourth completed.
Armored cruiser No. 2.			7,500		3,500,000	Sept. 7, 1888..	Being designed.

COAST-DEFENSE SHIPS.

Puritan.....	1875	Roach's Yard, Chester, Pa., and Brooklyn navy-yard.	6,060	3,700		Mar. 3, 1883; Mar. 3, 1885; Aug. 3, 1886; Mar. 3, 1887.	Half finished.
Amphitrite	1874	Harlan and Hollingsworth, Wilmington, Del., and Norfolk navy-yard.	3,815	1,600		...do	Do.
Monadnock.....	1874	Navy-yard, San Francisco, Cal.	3,815	3,000		...do	Two-fifths completed.
Miantonomoh.....	1874	Roach's Yard, Chester, Pa., and Brooklyn navy-yard.	3,815	1,426		...do	Do.
Terror	1874	Cramp's, Philadelphia, and Brooklyn navy-yard.	3,815	1,600		...do	Half finished.
Coast-defense vessel.		Union Iron Works, San Francisco, Cal.	4,003	5,400	1,628,950	Mar. 3, 1887 ...	Under contract of June 14, 1889.
Steel cruising monitor.			3,130	7,500	1,500,000	Mar. 2, 1889 ...	Plans completing. Ready for advertising in two months.
Ram for harbor defense.			12,000			...do	Plans not commenced.

* Statutory limit or contract price.

† Indicated.

‡ About.

Proposals having been invited January 28, 1889, for the machinery of the *Texas*, now in course of construction at the Norfolk navy-yard, they were received in due course and opened May 1, as follows:

I. P. Morris Company, Philadelphia, Pa. (machinery to be constructed according to Department's plans and specifications, with certain modifications thereof and changes therein, as proposed by the bidder).....	\$634, 750
The Richmond Locomotive and Machine Works, Richmond, Va., (machinery to be constructed according to Department's plans and specifications)....	634, 500
N. F. Palmer, jr., & Co., New York, N. Y. (machinery to be constructed according to Department's plans and specifications).....	682, 500
Southwark Foundry and Machine Company, Philadelphia, Pa. (machinery to be constructed according to the Department's plans and specifications)	645, 800
Charles Reeder & Sons, Baltimore, Md., (machinery to be constructed according to Department's plans and specifications).....	718, 900

The bid of the Richmond Locomotive and Machine Works, of Richmond, Va., for \$634,500, was accepted, and a contract was entered into by the Department with this company on May 30. The contract provides that the machinery, which is to be constructed in accordance with the plans and specifications furnished by the Department, shall be completed and set up at the works of the contractor within two years and six months from the date of the contract, and be erected and connected on board the vessel and ready for delivery within one year thereafter.

Under the advertisement of the Department of November 20, 1888, inviting proposals for the construction of machinery of the armored cruiser *Maine*, now building at the New York navy-yard, only one bid was received, that of N. F. Palmer, jr., & Co., of New York, for \$735,000. This proposal was accepted, and the contract was executed April 3, 1889, for the construction of machinery in accordance with the plans and specifications prepared by the Department. The time allowed for completion is the same as in the case of the machinery of the *Texas*.

Under the act approved August 3, 1886, authorizing the completion of the double-turreted monitors *Puritan*, *Amphitrite*, *Monadnock*, and *Terror*, proposals have been received and contracts made during the year for the materials required to complete the *Monadnock* and *Terror*, and proposals have been received and contracts awarded for materials required to complete the *Amphitrite*. Plans for the proposed change of the *Puritan* having been approved by the Bureau of Construction, they were submitted to examination by the board of bureau chiefs, and after receiving a favorable report were approved by the Department, and the work was ordered on June 26, 1889. By these changes the armament and armor protection are greatly increased, and the quarters for the officers and crew are improved. A similar change was ordered August 30 in the *Amphitrite*. The details of these changes will be found in the report of the Chief Constructor.

The act of Congress approved March 3, 1887, appropriated towards

the construction of "floating batteries or rams or other naval structures to be used for coast and harbor defenses," \$1,000,000, and provided that the final cost of "said floating batteries, rams, or other naval structures, exclusive of armament, should not exceed \$2,000,000." As stated in the annual report of the Chief of the Bureau of Ordnance for 1888, an advertisement was issued inviting the submission of proposals, on the 4th of January, 1889, for the construction of a submarine boat under the authority conferred by the act. On February 15, to which date the time was subsequently extended, bids for the construction of the boat were received.

It had also been decided, as stated in the last annual report of the Department, under the authority conferred by the above-mentioned act, "to build one light-draft, heavily-armored, harbor-defense floating battery or ram." Designs having been prepared by the Bureaus of Construction and of Steam Engineering after consultation with the Bureau of Ordnance, advertisements were issued inviting bids to be submitted February 15, 1889, which time was subsequently extended to April 3. On that date the following proposals were received:

The William Cramp & Sons Ship and Engine-Building Company, Philadelphia, Pa. (hull and machinery to be constructed according to plans and specifications provided by the Secretary of the Navy, with certain modifications thereof and changes therein, as provided by the bidder) ..	\$1,614,000
N. F. Palmer, Jr., & Co., New York, N. Y. (hull and machinery to be constructed according to the Department's plans and specifications).	1,690,000
The Union Iron Works, San Francisco, Cal. (hull and machinery to be constructed according to the Department's plans and specifications).	1,628,950

On the 4th of April the Department appointed a Board, consisting of the Chiefs of the Bureaus of Ordnance, Equipment, Construction, and Steam-Engineering, to report as to the cost of the vessel, including the armament and equipment, in case of the acceptance of one of the proposals made, and whether within the limitation fixed by the act, namely, \$2,000,000, the vessel could be built, and also the submarine torpedo-boat before referred to. The Board was further directed to report "as to which of said companies is the lowest bidder," and to furnish the Department "with such recommendation as the Board may deem proper to make in the matter."

The Board, after careful consideration of the subject, reported that the two vessels could not be built within the limitation of \$2,000,000, and recommended that all the proposals for the submarine torpedo-boat should be rejected; and that the proposal of the Union Iron Works for the construction of the armored coast-defense vessel, being the lowest that conformed to the requirements of the Department's advertisement, plans, and specifications, should be accepted.

In accordance with this report, the Department, April 23, 1889, rejected all the proposals for the torpedo-boat, and on June 14 entered into a contract with the Union Iron Works for the construction of the armored coast-defense vessel, at a cost of \$1,628,950. The contract

provides that the United States shall furnish the necessary armor, armor bolts, and their accessories, trim the armor-plates to size within reasonable manufacturing limits, and drill and tap all necessary holes therein, and deliver the armor, etc., at the ship-yard of the Union Iron Works, who shall fit, fix, place, and secure the armor to the vessel, and furnish all other materials and labor required. The vessel is to be completed in three years from the date of the contract.

The plans for the three remaining armored vessels authorized by law are not yet completed. It is estimated that those of the armored cruiser of 7,500 tons will be ready in three months. The plans for the steel cruising monitor will be ready in two months, and the plans for the harbor-defense ram are not yet begun.

The Bureau of Construction recommends, with reference to the single-turreted monitors, that some action be taken looking to the reclaiming of these vessels from "their present worse than useless condition." In view of the fact that the amount necessary for this purpose will reach about \$400,000, and that the vessels, with their present ineffective guns, will be no material addition to the force of the Navy, the Department can not concur in this recommendation. The only use to which these vessels can be advantageously put is to assign them to service as practice ships for the naval reserve in those States which have created such a branch of the militia, should they be desired for the purpose.

Ship.	Type.	Keel laid.	Where built or building.	Displacement.	Horse-power, estimated.	Cost.*
Chicago.....	Cruiser.....	1883	Roach's yard, Chester, Pa.	Tons. 4,500	15,084	\$889,000
Boston.....	do	1883	do	3,189	13,780	619,000
Atlanta.....	do	1883	do	3,189	13,356	617,000
Dolphin	Dispatch vessel.	1883	do	1,435	12,240	315,000
Newark	Cruiser	1887	Cramp's yard, Philadelphia, Pa.	4,083	8,500	1,248,000
Charleston.....	do	1887	Union Iron Works, San Francisco, Cal.	3,730	16,666	1,017,000
Baltimore.....	do	1887	Cramp's Yard, Philadelphia, Pa.	4,400	9,000	1,325,000
Philadelphia.....	do	1888	do	4,300	10,500	1,350,000
San Francisco	do	1888	Union Iron Works, San Francisco, Cal.	4,083	9,000	1,428,000
Yorktown	do	1887	Cramp's Yard, Philadelphia, Pa.	1,700	13,398	455,000
Concord	do	1888	Delaware River Iron Works, Chester, Pa.	1,700	3,400	490,000
Bennington	do	1888	do	1,700	3,400	490,000
Vesuvius	Dynamite gun-boat.	1887	Cramp's Yard, Philadelphia, Pa.	970	13,200	350,000
Petrel	Gun-boat ..	1887	Columbian Iron Works and Dry Dock Company, Baltimore, Md.	870	11,100	247,000
No. 6	Cruiser .....	.....	.....	5,300	.....	1,800,000
No. 7	do .....	.....	Navy-yard, Brooklyn.....	3,000	10,000	1,100,000
No. 8	do .....	.....	Navy-yard, Norfolk, Va.....	3,000	10,000	1,100,000
No. 9	do .....	.....	Columbian Iron Works and Dry Dock Company, Baltimore, Md.	2,000	5,400	612,500
No. 10	do .....	.....	do	2,000	5,400	612,500
No. 11	do .....	.....	Harrison Loring, Boston.....	2,000	5,400	674,000
No. 5.....	Gun-boat .....	.....	.....	1,000	1,600	350,000
No. 6.....	Gun-boat .....	.....	.....	1,000	1,600	350,000
Steel practice vessel.	.....	.....	.....	800	1,300	260,000
Torpedo boat No. 1.	.....	1888	Herreshoff's yard, Bristol, R. I.	99	1,600	82,750
Dynamite-gun boat No. 2.	.....	.....	.....	.....	.....	450,000

* Statutory limit or contract price.

† Indicated

‡ Contract.

VESSELS.

Ship.	Date of act authorizing building.	Contract executed.	Time allowed by contract.	Remarks.
Chicago	Aug. 5, 1882, Mar. 3, 1883	July 26, 1883	..... Mos.	In commission.
Boston	do	July 23, 1883	.....	Do.
Atlanta	do	July 23, 1883	.....	Do.
Dolphin	do	July 23, 1883	.....	Do.
Newark	Mar. 3, 1885, Mar. 3, 1887	Oct. 27, 1887	24	Two-thirds completed; nearly ready for launching.
Charleston	Mar. 3, 1885	Dec. 28, 1886	18	Preparing for commission.
Baltimore	Aug. 3, 1886	Dec. 17, 1886	18	Preparing for commission.
Philadelphia	Mar. 3, 1887	Oct. 27, 1887	24	Launched; eight-tenths completed.
San Francisco	do	Oct. 26, 1887	24	Do.
Yorktown	Mar. 3, 1885	Jan. 31, 1887	12	In commission.
Concord	Mar. 3, 1887	Nov. 15, 1887	18	Boilers in; eight-tenths completed.
Bennington	Mar. 3, 1887	Nov. 15, 1887	18	Boilers in; eight-tenths completed; ready for launching.
Vesuvius	Aug. 3, 1886	Feb. 11, 1887	12	Reported ready for delivery.
Petrel	Mar. 3, 1885	Dec. 22, 1886	12	Preparing for commission.
No. 6 (cruiser)	Sept. 7, 1888	.....	.....	Design commenced.
No. 7	do .....	.....	.....	To be constructed at New York navy-yard. Bids for material have been received and work commenced.
No. 8	do .....	.....	.....	To be constructed at Norfolk navy-yard. Bids for material have been received and work commenced.
No. 9	do	Nov. 2, 1889	30	Contracted for.
No. 10	do	do	30	Do.
No. 11	Sept. 7, 1888	Nov. 11, 1889	30	Contract awarded Nov. 1 to Harrison Loring.
No. 5	Mar. 2, 1889	.....	.....	Under advertisement.
No. 6 (gunboat)	Mar. 2, 1889	.....	.....	Do.
Steel practice vessel	Sept. 7, 1888	.....	.....	Under advertisement.
Torpedo boat No. 1	Aug. 3, 1886	Mar. 1, 1888	15	Completed except boiler.
Dynamite-gun boat No. 2	Mar. 2, 1889	.....	.....	Not yet begun.

Of the unarmored vessels in course of construction, four have been completed within the past year, as follows: The *Yorktown*, accepted April 4; the *Petrel*, October 24; the *Charleston*, November 6, and the *Baltimore*.

By advertisement of May 24, 1889, the Department invited proposals for the construction of the three cruisers of about 2,000 tons displacement each, at a cost of not more than \$700,000 each, authorized by act approved September 7, 1888; and by another advertisement of June 14, invited proposals for the construction of the two cruisers of about 3,000 tons each, at a cost of not more than \$1,100,000 each, authorized by the same act. All the proposals were opened at the Department August 22, as follows:

For the construction of two 3,000-ton cruisers, Nos. 7 and 8:	
The William Cramp & Sons Ship and Engine Building Company, Philadelphia, Pa., for the construction of one of said cruisers (hull and machinery to be constructed according to Department's plans and specifications)	\$1,225,000
Same company, for the construction of the other of said cruisers (hull and machinery to be constructed according to Department's plans and specifications)	1,225,000
For the construction of three 2,000-ton cruisers, Nos. 9, 10, and 11:	
The Bath Iron Works, Bath, Me., for the construction of one of such cruisers (hull and machinery to be constructed according to Department's plans and specifications)	780,000
The William Cramp & Sons Ship and Engine Building Company, Philadelphia, Pa., for the construction of one of such cruisers (hull and machinery to be constructed according to Department's plans and specifications)	875,000
Same company, for the construction of another of such cruisers (hull and machinery to be constructed according to Department's plans and specifications)	875,000
Same company, for the construction of the other of such cruisers (hull and machinery to be constructed according to Department's plans and specifications)	875,000

As the amounts for which these several proposals offered to construct the vessels were in excess of the limit fixed by Congress all of them were rejected. The Department then decided, as authorized by the act to build the two 3,000-ton vessels in the navy-yards, and on October 1, 1889, advertised for proposals for steel required for the construction of cruiser No. 7 at the New York navy-yard and for cruiser No. 8 at the Norfolk navy-yard. On the 5th of October another advertisement invited proposals for materials for use in the construction at the New York navy-yard of the machinery for both these cruisers. Proposals have been received under both these advertisements, and contracts have been awarded for 2,284 tons of steel for the hulls of these vessels.

It was decided to re-advertise for proposals for the construction of the three 2,000-ton vessels, and the advertisement was accordingly issued August 24. The law having directed that in the contract for these vessels such provisions for increased speed and premium should be

made as in the discretion of the Secretary of the Navy might be deemed advisable, the conditions of the previous advertisement were so far modified as to reduce the required speed from 18 knots to 17 knots, and to fix the premium for increased speed at \$25,000 for each quarter-knot in excess of the guaranteed speed of 17 knots. A penalty of \$25,000 was affixed for every quarter-knot that the vessels failed of reaching the guaranteed speed; and in case of failure to develop and maintain for four consecutive hours a speed of 16 knots, the vessels could be rejected. The time fixed for completion was also extended from two years to two years and six months.

The following proposals were received:

The Union Iron Works, San Francisco, Cal., for the construction of one of said vessels (hull and machinery to be constructed according to Department's plans and specifications)	\$775,000
Same company, for the construction of two of said vessels (same plans and specifications).....	1,450,000
Same company, for the construction of three of said vessels (same plans and specifications)	2,054,001
N. F. Palmer, jr., & Co., New York, N. Y., for the construction of one of said vessels (same plans and specifications).....	674,000
Columbian Iron Works and Dry Dock Company, Baltimore, Md., for the construction of one of said vessels (same plans and specifications)...	625,000.00
Same company, for the construction of two of said vessels (same plans and specifications)	1,225,000.00
The Bath Iron Works, Bath, Me., for the construction of one of said vessels (same plans and specifications)	675,000.00
Same company, for two of said vessels or three of said vessels at same rate.	
Harrison Loring, Boston, Mass., for the construction of one of said vessels (same plans and specifications).....	674,000.00

October 28 the Department awarded to the Columbian Iron Works and Dry Dock Company of Baltimore, Md., contracts for the construction of two of these cruisers for the sum of \$612,500 each, and on the first of November awarded to Harrison Loring the contract for the construction of the other cruiser for the sum of \$674,000.

The Department, on November 19, invited proposals for the construction of the two vessels (gun-boats Nos. 5 and 6) of 1,000 tons, authorized by the act of March 2, 1889, and of the steel practice vessel of 800 tons, authorized by the act of September 7, 1888. These proposals will be opened in January.

The dynamite-gunboat *Vesuvius*, authorized by the act of February 11, 1887, has been completed but not yet accepted.

Of the two remaining unarmored vessels authorized by law but not yet completed, the most important is the cruiser of 5,300 tons (cruiser No. 6). The designs of this vessel are begun. The second vessel is the dynamite gunboat No. 2, of the *Vesuvius* type, which was authorized by the act of March 2, 1889, under the proviso that the Secretary of the Navy should be satisfied, after official tests made with the *Vesuvius* and her guns, as to the efficiency of the armament of that vessel. Action

has therefore been deferred until the final decision as to the *Vesuvius*.

The appropriation for the fiscal year now current provided for the construction or purchase by contract of four steam-tugs. One of these, the *Triton*, has been purchased, and another is under consideration. Bids for the two remaining tugs have been received within the statutory limit.

ENLISTED MEN.

Of equal importance with the construction of suitable vessels is the creation of an efficient personnel. A ship is worth what her captain and crew are worth. She is of no use unless her officers and men have the qualities to fight her. To insure the thorough efficiency of the corps of enlisted men in the Navy, three things are necessary: first, that it should be composed of American citizens or of those who have declared their intention to become citizens; secondly, that they should have adequate training for their work; and, thirdly, that the system of enlistment and discharge should be so regulated as to secure the retention of good men in the service.

At the present time the crews of our naval vessels are in large part composed of foreigners, or of men whose nationality is uncertain, and who are ready to serve any government that will pay them. It can not be expected that crews so composed will be a safe reliance for the country if their services should be needed in war. Such men are held by nothing but their contract of enlistment, and subject at the first temptation to desert the flag of a country in which they have never resided, and to which they are bound by no ties of birth or allegiance. To them the flag represents nothing. The American who deserts must expatriate himself, but the foreigner who deserts the American service goes to his own home. For a man so placed desertion has no penalties.

In the matter of training, the altered conditions of naval warfare and the exceptional character of the implements now employed have made great changes necessary. In the old sailing frigate any mariner could in a short time be converted into a good man-of-war sailor, and ships were manned chiefly and successfully by men of this class both in our own country and in Europe. Even at that time training was of great importance, above all, training in the handling and fighting of guns; and it was to the superior skill of our American seamen in this respect that the victories of the war of 1812 were largely due. At the present day the necessity of training has greatly increased. It is not to be supposed that men taken at hap-hazard from the sea-faring class can supply, after a little practice and drill, as was formerly the case, efficient crews for such complicated structures as the modern ships of the Navy armed with modern guns. The training required to make good seamen can only be given by taking them in their youth and putting them through a thorough course of practice. Even then they will hardly reach a fair standard of efficiency until after some years of experience.

To meet the want of trained American seamen, the naval-apprentice system was established. The Department, at great labor and considerable expense, has steadily improved this system, until at the present time it turns out apprentices of excellent quality. From all this, however, the Navy derives little benefit. All terms of enlistment of apprentices now expire at twenty-one years of age. When they reach this point the majority of them leave the service forever. They have received an education at great expense to the Government, and yet have been too short a time in the service to have formed an enduring attachment to it. They carry off with their discharge the benefits of the Government's outlay, and apply them to the pursuit of other careers. The Government educates them as boys to lose their services as men, and the result is that while we have provided an elaborate system of training, we are forced to depend for seamen on an untrained service largely composed of foreigners.

The plain remedy lies in a statutory extension of the term of enlistment to twenty-four years of age. During the additional three years, the formation of associations and a mature judgment will lessen the inclination for change, and the Government will get the services of those whom it has trained, for at least one full cruise. In the English navy, the adoption of a rule retaining those who enlist as boys until the age of twenty-eight or thirty has completely changed the character of the enlisted force.

It is further recommended that the number of apprentices be increased from 750, as now allowed by law, to 1,500, making the total enlisted force 9,000. At the same time, the course in the training-ships should be extended by the formation of a special class for training in gunnery on board a ship devoted exclusively to this purpose. The incalculable importance of giving to enlisted men this training, especially in view of the change in naval armaments that is now in progress, has induced me to set apart the *Lancaster* as a gunnery-ship; and I strongly urge that authority be given to procure for her at once a modern battery.

To perfect the system of manning the Navy, a further reform is needed in the method of enlistment. Under existing law (Rev. Stat., sec. 1418) men "may be enlisted to serve for a period not exceeding five years, unless sooner discharged by direction of the President." Although this law was enacted as long ago as 1837, the custom of the Department has been to enlist men as a rule for three years, and the statutes relating to honorable discharges have been conformed to this usage.

The duration of a naval cruise is, in general, three years. The crews of vessels preparing for sea are necessarily brought together in receiving-ships before she sails, frequently several months before, as the completion of her outfit may be delayed. As the crews are enlisted for exactly three years, in the majority of cases the time of the men expires several months, sometimes even a whole year, before the ship returns, and the advance of 25 per cent. additional pay, to which

those holding over are entitled under the law, is a heavy addition to the cost of maintenance. To remedy this defect the Department proposes to adopt a four-years' term of enlistment, and it recommends that the laws (Rev. Stat., sections 1426, 1573) relating to honorable discharges after three years' service, and to allowances upon a three-years re-enlistment, be amended accordingly.

The lengthening of the term of enlistment, although an important measure, will not secure a character of permanence in the corps of enlisted men. In order to obtain a body of trained American seamen upon which the Navy and the country can rely, it is absolutely necessary that the whole system of temporary enlistment should be replaced by a continuous-service system, the four years' term being retained only to meet necessary emergencies. This system should be based upon the principle of retaining the services of the enlisted man for life. We shall never get the crews that we need until we make the navy a career for the seamen as well as for the officers. To accomplish this the continuous-service man should be permanently enlisted, and be entitled to retirement on three-fourths pay after thirty years of service, as provided by law, (Act of February 14, 1885) for the Army and Marine Corps. There is no reason for a distinction between the Army and Navy. No alien should be accepted for continuous service, and no man above the age of thirty-five, unless he has had previous naval experience. At the end of the first four years of service he should have an option of taking his discharge or remaining, but failing to take it at that time, his connection with the service should thenceforth be permanent, unless the Department should, in its discretion, grant his application for discharge, or unless he should be removed by sentence of a court-martial. Discharges in any case should work a forfeiture of all prospective benefits of pay and retirement. Continuous-service men should be entitled to one month's leave for each year of service, to be granted at the convenience of the Navy Department, and to be cumulative up to four months, which will be equivalent to the three months' leave now granted for re-enlistment, and which may be similarly commuted, and a small addition, of \$1 per month or thereabouts, should be made to the pay of the various ratings for each completed term of four years' service.

The reform proposed above has been carefully considered, and is believed to be indispensable to the efficiency of the corps of enlisted men. In no other way will it be possible to obtain for the Navy American seamen of the required experience and qualifications. The service is now entering upon a new era, in which the obsolete fleet of eight years ago is to be replaced by modern constructions, which have been acquired at considerable cost, and are the product of the highest professional intelligence and skill. To risk this new fleet in the hands of mongrel crews, and to diminish, if not destroy, its efficiency for service by a bad system of manning the Navy, is a short-sighted and foolish policy that can only result in loss and disaster.

Under existing law (sections 4810, 4813, Revised Statutes) pensioners who become inmates of the Naval Home, formerly known as the Naval Asylum, are obliged to relinquish their pensions during their residence at the Home. A similar provision formerly existed with reference to the Soldiers' Home, but it was done away with by the act of March 3, 1883, which provided that pensioners therein should continue to draw their pensions under certain regulations. As there is no reason whatever for this discrimination, which works great injustice to naval pensioners, the Department recommends the passage of a law placing them on the same footing with their comrades of the Army.

NAVAL RESERVE.

The question of the creation of a naval reserve demands the early attention of Congress. This reserve should be composed of ships, officers, and seamen. I have spoken elsewhere of the necessity of making arrangements by which the owners of merchant steamers may be induced to adapt their vessels to naval use, so that the Government may employ them as an auxiliary force in time of war. During the civil war the number of ships in the Navy increased from 90 to 700, and the efficiency of this force would have been incalculably strengthened had provision been made beforehand for adapting vessels to war service.

The necessity for a trained reserve of officers and seamen is equally great. In accordance with the wise policy of American institutions, the force maintained constantly in the service is small. Any sudden demand upon this force would compel immediate expansion. Arrangements should be made beforehand to meet this demand.

The numerical strength of our Army is not measured by the standing force, but by the trained militia behind it. The same should be true of the Navy. The necessity is even greater in this branch of the service, because a naval militia must have a special training to render it efficient in case of emergency, and it must be drawn from a limited portion of the population.

The subject has already received considerable attention, both in Congress and in the State legislatures. Congress has as yet failed to pass any law on the subject, but the legislatures of several States, taking the initiative, have made arrangements for the creation of a naval militia. In so far as these measures require the co-operation of the United States Government, I am heartily in favor of giving it. Where stationary vessels are desired for purposes of gunnery training, I recommend that the Department be authorized to furnish such vessels as are now laid up, unfit for sea service, to States making provision for a naval militia, upon their request. Authority should also be given for the issue of arms, and such legislation should be adopted by Congress as is necessary to give the new system vigor and efficiency.

NAVY-YARDS.

On the broad question, which arose in the case of the two 3,000-ton cruisers, of the comparative advantages of the two systems of naval construction, the first in the Government yards and the second by contract with private firms, the Department is firmly of the opinion that the latter is the best method. The importance of encouraging private enterprise in this direction and of creating and developing one of the most valuable and useful industries to which American labor and capital can be devoted is sufficient to turn the scale, provided that the results obtained are equally good. The success of the experiments made thus far in constructing modern ships by contract proves conclusively that our private works and workmen have the skill and talent to give the Navy as good ships as the world affords.

The recent growth and extension of the ship-building industry is a gratifying evidence of the benefits that have come from this encouragement by the Government. The builders have met the demands of the Department in a large and enterprising spirit. Additional capital has been invested, workmen have been trained, and materials have been improved to answer the requirements of the official inspectors, new processes have become familiar, and one difficulty after another has been overcome. It may reasonably be expected that as ship-building in America is gradually improved and cheapened, additional private business will be attracted to these growing establishments, until in time the world's market for ships will be divided between this country and Europe.

All these advantages are lost by a policy that confines the construction of vessels exclusively to the navy-yards. Still, it is advisable that the Navy should build some of its ships. The number of private concerns is so small that circumstances might readily arise which would place the Department at the mercy of combinations. To prevent this it must itself enter the field and become at least a possible competitor with other bidders. Apart from this danger, and supposing that there were room enough at private yards, which there is not at the present time, for them to undertake all the large vessels that we need, the Government should have at its command the skill and the plant for building its vessels occasionally, and for repairing them at all times. For this purpose its own officers must have practice in carrying out their designs through all the stages to the finished product.

It is therefore believed that, while the great majority of our new vessels should be constructed by private builders, the Government yards should also be utilized to a limited extent. If they fail to produce as satisfactory results as the private builders, either in workmanship, in cost, or in time, those in whose charge they are should be held to a rigid responsibility. If this is exacted there is no inherent reason why building in the navy-yards should not be as well done as by any other process, and at approximately the same cost.

The only naval stations now in use as construction yards are Brooklyn, Norfolk, Mare Island, and Portsmouth, the last for wooden vessels only. The other navy-yards were closed, as far as construction and repair were concerned, by order of the Secretary, June 23, 1883, under the provisions of the act of August 5, 1882.

The Department having taken this action in pursuance of law, the yards referred to must remain closed until the law shall re-open them. It rests with Congress to decide whether the steps that have been taken shall be retraced, and the number of places at which vessels may be constructed and repaired shall be increased. At some future time such an increase will certainly become necessary. Whether it is needed now depends primarily upon the rapidity with which Congress desires to construct an effective navy. At present there are building sites for eight ships at Brooklyn and Norfolk, and for three at Mare Island. Of the former five are now occupied. Provision has been made for supplying these yards with a working plant, which is now in part delivered. A further appropriation of \$50,000 is required for tools at Brooklyn. The three construction yards will then have a working outfit. If additional facilities are needed to hasten the construction of the navy, they may be provided either at Boston or League Island, each of which presents considerable advantages of situation.

The Boston navy-yard was fitted out several years ago with an excellent plant for building the old wooden ships. It has the necessary tools for making boats, furniture, blocks, spars, and other articles of outfit. It has facilities for building machinery and large tools. The yard is capacious and possesses substantial buildings, a stone dry-dock, three ship-houses, and three building slips. The harbor is a fine one with deep water, and the surrounding population affords an ample supply of good mechanics. A modern plant for building steel vessels, sufficient for work on an extensive scale, can be set up at moderate cost.

The League Island yard has remained since its transfer to the Navy Department largely in an undeveloped state. It has no ship-houses or building-slips, and a considerable part of its acreage, though not overflowed, is below the level of high water. Nevertheless the fact is recognized that it has exceptional advantages of site. It is in the center of the steel and iron producing and manufacturing district. In its immediate neighborhood are some of the largest ship-building establishments of the country. Finally, and of the greatest importance, it has fresh water in which to lay up iron and steel ships. In this last respect it stands alone, and this consideration is of itself sufficient to warrant its gradual improvement. The yard should therefore be put in such order as to make it available at least for purposes of repair. The appropriations made at the last two sessions, for a protecting wall and landing wharf, for filling in and dredging, and above all for a timber dry-dock costing half a million, which is now in process of construction,

clearly indicate that the last Congress had such an intention. A further outlay with the same general object would supply the necessary furnaces, tools, and other plant, at a reasonable figure. At some future time, as the steel vessels of the Navy are completed, the use of this yard with its fresh-water anchorage will become a necessity, and a comprehensive plan of development should then be considered.

With a view to determine plans for the gradual improvement of the League Island yard, a board of officers was appointed to consider the question in detail and to make a report to the Department. A second board was appointed to make a similar report in reference to the Brooklyn yard, the latter being the most extensive, and on the whole the best equipped of all the navy-yards. The reports of these boards, transmitted, respectively, October 14 and November 9, 1889, favor a large and expensive scheme of development, involving an outlay of \$14,000,000 in the case of League Island and \$8,000,000 in that of Brooklyn. There is nothing at the present time to warrant such an undertaking. The views of the Department in reference to League Island have been already stated. All that it now recommends for the Brooklyn yard is a sufficient appropriation to prevent the destruction of the property. The insufficiency of appropriations in recent years has permitted the cob-dock to go to ruin, and the wharves and buildings to become dilapidated. According to the report of the board on permanent improvement, many of the buildings have fallen into decay, and a few show signs of ultimate collapse.

The same state of things exists at other yards, and has existed for some time. The Chief of the Bureau of Yards and Docks, Commodore (now Rear-Admiral) D. B. Harmony stated in his annual report for 1886:

Scarcely a week has passed since I assumed control of this Bureau that reports have not been received of buildings tumbling down or liable to do so at any moment, roofs leaking to such an extent as to involve destruction of property, wharves rotting and falling into the water, and others so defective that they can not be used, water service defective on account of worn-out pipes, and a complaint of decay that implies general destruction.

The small appropriations for the past year have been expended with the greatest economy, and as much done as was possible with the limited amount to arrest this deterioration of the Government property, but being so inadequate it has had but little effect.

The present Chief of Bureau, in his report of the 14th of October last, tells the same story. He says:

The general condition of the buildings, wharves, and other Government property is lamentable, and Congress should make sufficient appropriations to arrest the decay and deterioration.

As stated by my predecessor in his last annual report, in a comparison of the naval expenditures for the fiscal years 1882-'84 with those for 1886-'88, considerable reductions were effected by him in the running expenses of the Bureaus. Among these reductions was one of \$550,000 for yards and docks. The appropriation referred to by Com-

modore Harmony as being so inadequate as to have little effect in arresting deterioration is one of the three in which the reduction was accomplished. The result is that the present administration of the Department finds itself handicapped by this tumble-down condition of navy-yard property. In accepting this responsibility it is proper that the facts should be made known. I propose to adhere rigidly to a policy of economical administration; but I do not propose to shirk the task of keeping the navy-yard property in a decent state of repair merely for the sake of showing a creditable balance-sheet. The state of things should be remedied at once, even if it costs money to do it. It will cost more now than it would have cost if it had been done earlier, and a further delay will only involve heavier expenditure. There is no economy in such a policy.

The plan which I would recommend is a simple one and involves no drain upon the Treasury. I shall have occasion to speak elsewhere in this report of the vast quantity of stores which have been allowed to accumulate at the navy-yards. These stores amounted in nominal value on June 30, 1888, to \$15,000,000. A large part of them are useless. So far from decreasing during the fiscal year 1888-'89, the stock on hand at its close showed a net increase of over \$189,000. I recommend that these useless stores, which are only a source of expense, be sold, and that out of the proceeds of sales the sum of \$550,000, being the amount by which the expenditures of 1886-'88 for yards and docks were reduced below those of 1882-'84, be re-appropriated for the preservation of Government property in the navy-yards. It is believed that this sum, in addition to the regular appropriation, will be sufficient, for a time at least, to arrest the deterioration that has been reported by the Bureau for the last four years.

In compliance with the act approved September 7, 1888, two commissions were appointed, one "to report as to the most desirable location on or near the coast of the Gulf of Mexico and the south Atlantic coast for navy-yards and dry-docks," and the other "to examine the coast north of the forty-second parallel, * * and select a suitable site * * for a navy-yard and dry-dock."

The conclusions of the first board, of which Commodore W. P. McCann is president, have been submitted as this report is going to press, and the Department has not been able to consider the subject sufficiently to make the recommendation required by law at the present time. The board visited and carefully examined all the available sites on the South Atlantic and Gulf coasts, and recommends the establishment of a navy-yard at Algiers, on the Mississippi River, opposite the city of New Orleans. The Navy unquestionably needs a station on the Gulf or its tributary waters, and the only question is the selection of the most suitable site. As soon as the subject can receive the attention which its importance deserves, the report will be transmitted to Congress with the Department's recommendations.

The suggestion that the naval station at Port Royal, S. C., be provided with a dry-dock and other necessary facilities for docking vessels is heartily approved.

The second commission, of which Capt. A. T. Mahan was president, presented, September 15, 1889, an able and exhaustive report, which is transmitted herewith. The commission narrowed down their selection to the shores of Puget Sound; and among the various sites in that neighborhood there were two that seemed entitled to special consideration. One of these was upon Lake Washington, a large sheet of water lying back of the city of Seattle. The other was at Point Turner, on the opposite side of the sound. The commission, while stating their opinion that "a suitable site can be found on the lake," decided in favor of Point Turner, mainly on strategic grounds.

As Lake Washington has no natural navigable outlet, it could only be made available by the construction of a canal of some 4 miles in length. The Commission believe that such a canal can be built, the only questions being those of cost and expediency, on neither of which did they feel called upon to express or form an opinion. The Department is therefore without information on this important point. The advantages of the lake site are a fresh-water basin, immunity from attack, and convenience of access to the center of population and of commercial and manufacturing activity. The second of these advantages the Commission find equally present at Point Turner. The first and third are entirely absent, but the Commission consider their force to be outweighed by the disadvantage, from a military point of view, of a canal as the only means of ingress and egress.

The Department, in presenting the report, is not satisfied as to the finality of its conclusions. Upon the military problem involved some difference of opinion exists among experts, and it is doubtful whether the strategic side of the question has not been considered too much at the expense of the industrial. On the other hand, the Department is not sufficiently advised as to the proposed canal to make any recommendations in reference to it. If, as would seem to be the case, it will be largely used for commercial purposes, and thus be of great benefit to the city of Seattle, the cost of its construction should not be borne wholly by the general Government. In any case, the Department can not recommend that the canal should be built solely for the benefit of a possible navy-yard on the lake.

The objects of a navy-yard are threefold: it may be a construction yard, a repair yard, or a naval station, or all combined. For a new construction yard the Navy Department has no use. A repair yard in the Northwest will be necessary at some future time, and the time is not very far off. Vessels in those waters must not be under the necessity of going 2,000 miles, to San Francisco and back, to clean their bottoms or to have slight repairs made. The site for such a yard is unquestionably in Puget Sound, which has all the advantages of favorable posi-

tion, great extent of navigable waters, freedom from dangers and from obstruction by ice, a temperate climate, a promise of extraordinary development, and great natural resources in coal, iron, and timber. A naval station there is needed now. Apart from the canal, the lake site would probably be the most desirable and also the cheapest, in view of the possibility, in fresh water, of substituting wood for masonry in the construction of wharves and docks. Until the Department sees some prospect of such a canal, however, it can not recommend this site, and if the canal should not be built, the station should be established at Point Turner.

Whatever policy may be adopted by Congress in reference to new navy-yards, or to the re-opening of those that are now closed, any extension of the existing system should be made with caution. The object of the Government at the present time is to get efficient ships and guns, and every expenditure for material development should be retrenched unsparingly, unless it tends directly to this result, or is necessary to keep in an efficient state the working establishment and the Government property ashore and afloat. The reduction adopted in 1883 was a wise policy. The changed conditions of to-day may modify that policy to a limited extent, but development should come slowly. Navy-yard officials tend naturally to a magnified view of their wants in the matter of improving the property in their charge, and do not feel the restraints which a close margin of profits imposes on a private manufacturer. The double character of the yard as a workshop and as a military post promotes this tendency, and the demands of the surrounding community strengthen it and give voice to it in Congress.

The number of military posts for naval purposes is none too large, but the number of work-shops should be limited strictly to actual necessities. Every increase of this kind draws after it an annual series of long bills for maintenance. If the door is once opened to large schemes of so-called improvement, upon official recommendations ably seconded, perhaps in part induced, by local influences, the Government will soon find that instead of maintaining its yards for the benefit of the fleet, it is maintaining its fleet for the benefit of the yards; and enough millions will in a short time have been spent to build the best navy in the world, with nothing to show for it but a large number of imposing but unnecessary shore establishments.

COALING STATION AT SAMOA.

In February last the Department purchased and shipped to Pago Pago 1,912 tons of coal. This coal was discharged and stored on the land leased by the Government.

In pursuance of the act approved March 2, 1889, the Department has caused surveys of the harbor to be made with a view to the selection of a site for a coaling station and for the location of the necessary wharf and store-houses. Rear-Admiral Kimberly, under whose direction

these surveys were made, has selected a suitable site, consisting of 121 acres of land. The necessity of establishing foreign coaling stations, and the increasing commercial importance of these islands, render it desirable to place this station as soon as possible on a permanent basis.

ORDNANCE.

The number of high-power steel cannon for the Navy completed to date includes two 5-inch, forty-eight 6-inch, eight 8-inch, and three 10-inch. During the past year twenty-one 6-inch guns have been finished at the Washington navy-yard, three at the West Point Foundry, and three at the South Boston Iron Works. Besides these, nine guns are in course of construction.

The material for several guns has been received from the Bethlehem Iron Company, and the Bureau has begun the manufacture of four of them for the *Baltimore* and two for the *Charleston*. These are the largest and most powerful guns ever made from steel produced wholly in the United States. Two 10-inch guns have been completed, making three now ready for the armament of the *Miantonomoh*. Designs have been made for the 12-inch guns, of which four are to be mounted on the *Puritan* and two on the *Texas*.

Experiments continue to be made with promising results with a view to perfecting carriages, fuzes, primers, and the various classes of powder. The question of projectiles is still in an unsatisfactory state. The cast-steel common shell so far furnished fail to show sufficient resistance to disrupting strains caused by their passage through steel plates such as are used on the sides of unarmored vessels. In armor-piercing shells we are far behind foreign manufacturers, the projectiles breaking up after striking or entering the target. In order to induce American manufacturers to produce better results, proposals have been invited for projectiles to the amount of \$200,000.

Of the ninety-four Hotchkiss guns contracted for, seventy-seven have been delivered, all of which, together with their ammunition, have been manufactured in the United States. The Maxim automatic machine guns having undergone a satisfactory test, negotiations with the company have been entered into for the supply of sixty-six guns of this type of American manufacture. The domestication of their manufacture in the United States is now assured, and thus an important gain has been made to the producing capacity of the country.

The Bethlehem Iron Works have completed their gun-forging plant, and the 120-ton hammer to be used in forging armor-plates has made good progress. The plant erected at the works is of superior character. The first gun-forgings were delivered in June last, and it is thought that every endeavor will be made by the company to hasten all the forgings contracted for.

The gun-factory at the Washington navy-yard, under the direction of Commander William M. Folger, has made extensive progress during the year. The 25-ton and 40-ton cranes are working satisfactorily, and

have shown their great usefulness. The 110-ton crane is nearly completed. All the boilers, and the engines, with one exception, are in place, and a large number of the machine tools are erected and running. The powerful tools for the manufacture of the heaviest guns are still to be procured, the offers thus far made on bidders' designs having been excessive in price, and the Department having therefore decided that it would call for new bids on its own designs. The completion and installation of the extensive plant for the gun-factory have somewhat exceeded the original estimate, and a further appropriation of \$145,000 is asked for. The importance of this work justifies the expense, and it is believed that when the plant is completed, the United States will have a gun-factory as well equipped and as efficient as any in the world.

NAMING, RATING, AND COMMAND OF VESSELS.

The laws relating to the naming, rating, and command of vessels (Revised Statutes, sections 1529-1531) should be amended to conform to modern conditions. The classification in the statutes relates to the types of thirty years ago, and not only does not apply, but is impossible of application, to modern ships. According to section 1530, which prescribes the ratings, steam-ships of forty guns or more are classed as first-rates; those of twenty guns and under forty, as second rates; and all those of less than twenty guns, as third rates. We have not now, nor are we likely ever to have, a first-rate ship, as described by the statute, and it is doubtful whether such a vessel can be said to exist in any of the navies of the world. The only classification which can properly be applied at the present day is that made on the basis of displacement.

The law limiting details for command to certain specified grades is also unsuited to the conditions now prevailing. It is therefore recommended that the law be repealed and that the war ships of the Navy, of whatever type, be hereafter classified as follows: First class, of 5,000 tons displacement and over; second class, of 3,000 or more and below 5,000; third class, of 1,000 or more and below 3,000; fourth class, under 1,000 tons.

It is recommended that the following rule be adopted for the naming of vessels:

Battle-ships, after the States of the Union; cruisers, after the cities; coast defenders, armored, after important events or names connected with the history of the United States; coast defenders, unarmored, after rivers of the Union. Vessels of special classes should be given names appropriate to the service for which they are intended.

SHIPS IN COMMISSION.

The North Atlantic Squadron is commanded by Rear-Admiral Bancroft Gherardi, who succeeded Rear-Admiral S. B. Luce February 13. The squadron at present consists of the *Galena*, *Kearsarge*, *Dolphin*, and

Yantic, the *Atlanta* having for a short time been employed with it, the *Pensacola* having been detached for other duty, and the *Ossipee* put out of commission. The *Kearsarge* was detailed to this squadron upon her return from the South Atlantic Station, with the crew of the *Tallapoosa*. The *Yantic* recently sailed for the West Indies, conveying Lieutenant Norris and party, who will be engaged in the telegraphic determination of longitudes.

Owing to the unsettled condition of affairs upon the Isthmus, and to the Haytian revolution, these vessels have been stationed during most of the year in West Indian waters. Their presence at Port-au-Prince upon several occasions brought about a prompt and equitable arrangement of misunderstandings which might otherwise have resulted in long and tedious controversies, the principal of these occasions being the seizure of the steamers *Haytian Republic* and *Ozama* for alleged violation of the blockade. The negotiations which resulted in the release of the vessels reflected credit upon the officers concerned.

A riot having been reported on the guano island of Navassa, where the Navassa Phosphate Company, an American concern, is operating, the flag-ship *Galena* was dispatched to that place and secured nine of the alleged ringleaders, who were brought to Baltimore and turned over to the Federal authorities.

The *Pensacola* sailed in October for St. Paul de Loando, on the west coast of Africa, taking out the expedition for the observation of the total eclipse of the sun, December 22, 1889, in pursuance of the act of March 2, 1889.

The Department having been advised that three men had been left by the American schooner *Anna* on the uninhabited island of Arenas Cay, and were likely to perish by starvation, the *Ossipee* was sent there and rescued the two survivors.

The *South Atlantic Squadron* continues under the command of Acting Rear-Admiral James H. Gillis, and consists of the flag-ship *Richmond* and the *Tallapoosa*, the former having been assigned to this station within the year. The *Swatara* was detached and ordered to the Asiatic Station via Madagascar, where she assisted in procuring the arrest and trial of the master of an American schooner, who was charged with the murder of the U. S. consular agent at Andakabé.

The *Alliance*, having completed her cruise, was detached, ordered home, and put out of commission.

The *Asiatic Squadron* is commanded by Rear-Admiral George E. Belknap, who assumed command April 4, his predecessor, Rear-Admiral Ralph Chandler, having died suddenly at Hong-Kong, February 11. The vessels composing the squadron are the flag-ship *Omaha*, the *Marion*, *Monocacy*, *Palos*, and *Swatara*, the *Essex* having returned home upon completing her commission.

The *Pacific Squadron* continues under the command of Rear-Admiral L. A. Kimberly, and consists of the *Mohican*, the *Adams*, *Alert*, *Nipsic*,

Pinta, *Iroquois*, and the store-ship *Monongahela*. The *Trenton* and *Vandalia* were wrecked in the harbor of Apia on the 16th of March. The *Nipsic* was beached at the same time, but afterwards got afloat, and although she had lost her rudder and smoke-pipe, and was otherwise badly injured, she was repaired and fitted for the voyage to Honolulu. Here permanent repairs were made and the ship rendered fit to continue her cruise. Much property was saved from the wrecked ships by their crews, who were thus given occupation until they could return to San Francisco. The correspondence relating to the disaster at Samoa will be found in the Appendix.

The political uneasiness in the Hawaiian Islands renders the presence of a ship at Honolulu a necessary precaution, and one has therefore been kept at that point.

The *European Squadron* was under the command of Acting Rear-Admiral James A. Greer until the 24th of June, when he was ordered home. The *Lancaster* and the *Quinnebaug* were detached upon the completion of their commissions, leaving the *Enterprise*, under Commander B. H. McCalla, the only vessel on the station. The *Enterprise* was temporarily employed on the east coast of Africa, to investigate the case of the American schooner *Solitaire*, alleged to have been engaged in the slave trade, and to protect the lives and property of American citizens upon that coast, which were thought to be in danger from the natives.

Squadron of evolution.—The completion of a sufficient number of new ships enables the Department to form a squadron of evolution. The squadron, composed of the *Chicago*, *Boston*, *Atlanta*, and *Yorktown*, sailed from New York November 18, for Europe, under the command of Acting Rear-Admiral John G. Walker, and with the addition of the *Enterprise* will constitute the United States naval force on that station.

The *Training Squadron* consists of the *Jamestown* and *Portsmouth*, both of which have made the usual summer cruise, the latter having also made a cruise to the West Indies last winter. The *Saratoga* has been thoroughly refitted, in pursuance of the acts of June 20, 1874, and July 26, 1886, and turned over to the State of Pennsylvania for use as a nautical school ship at Philadelphia.

Special and detached service.—The *Despatch*, *Ranger*, *Michigan*, and the *Thetis* continue on the same service as during last year. The *Thetis* has made a cruise to the Arctic, rescuing three of the survivors of the American whaling bark *Little Ohio*, and one of the crew of the bark *Ohio Second*, the former wrecked on Point Hope on October 3, 1888, and the latter at Nanwak Island, Behring Sea, on June 6, 1889.

DISASTER AT SAMOA.

The severest disaster which has befallen the Navy in recent years took place at Apia, Samoa, on the 16th of March, 1889. During a hurricane on that date, two vessels, the *Trenton* and *Vandalia*, were totally

wrecked, and the *Nipsic* was run on shore to save her from destruction. Capt. C. M. Schoonmaker, Paymaster F. H. Arms, Lieut. F. E. Sutton, U. S. Marine Corps, and Paymaster's Clerk John Roche, and 46 enlisted men lost their lives in the performance of duty. The report of Rear-Admiral Kimberly, commanding the Pacific station, shows that nothing that skill or experience could suggest was left undone to avert the catastrophe, but the vessels, with old-fashioned engines and defective steam-power, were wholly unable to withstand the fury of the hurricane. The loss of the *Trenton* and *Vandalia*, two of the best of the old wooden fleet, is a serious blow to the Navy in its present condition. They were abandoned on the 7th of July, after much of their armament and equipment had been saved. The *Nipsic* proceeded to the Sandwich Islands, where she has since been repaired and fitted for active service. The escape of the British ship *Calliope*, by steaming out to sea in safety during the hurricane, illustrates the value of high-power engines in war vessels.

The gallantry and fortitude displayed by Rear-Admiral Kimberly, his officers and men, at the time of the disaster, were such as to call forth the warmest commendations of the Department.

The natives of Samoa rendered valuable assistance in the rescue of life and saving of property, and their efforts have been suitably rewarded. Much suffering was caused among them by the destruction of their crops by the storm, and Rear-Admiral Kimberly was authorized to issue rations to them from the store-ship *Monongahela*, then at Pago Pago.

The Department authorized the charter of a steamer in Australia to convey the survivors to San Francisco, where they arrived on the 20th of May, with the exception of a few officers and men who were detained at Apia to look after American interests until the arrival of another vessel.

The heavy expense involved in the transportation home of the wrecked crews, amounting to about \$50,000, should be made the subject of a special appropriation, instead of being charged as a deficiency against the miscellaneous and contingent funds.

NAVAL WAR COLLEGE.

Recent legislation and administrative regulation have so complicated the situation of the Naval War College at Newport, R. I., that the Department does not feel justified in undertaking the construction of the building authorized March 2, 1889, until Congress shall have expressed itself more definitely on the question of site.

The Department feels no doubt, however, as to what that site should be. Goat Island has a restricted space, which is already sufficiently taken up. The Navy has only a right of temporary occupation on the island, which may determine at any time. Under these circumstances, it is recommended that no additional buildings be placed there. On

the other hand, Coaster's Harbor offers an excellent site, with abundance of room, and it can be reached by land. It belongs to the Navy, and it should ultimately be the headquarters of all the consolidated naval establishments at Newport.

The present condition of things, in which the college is made a sort of appendage to the Torpedo Station, under the Bureau of Ordnance, should be corrected. It is attaching the greater to the less. The work of the Bureau of Ordnance has no connection with that of the War College, and no reason can be assigned for placing the college under that Bureau. Torpedo instruction should be a part of the training given in the science of war, but the school at which this training is undertaken should not be a torpedo school with a subsidiary course in naval strategy. Ultimately, all the educational establishments at Newport should be placed under a single officer, and the consolidated establishment, like all others pertaining to education, should be under the Bureau of Navigation.

For the present, the Department has only to recommend that the building for which appropriation was made at the last session be placed on Coaster's Harbor, and that the appropriation be made under the head of "Bureau of Navigation."

The War College is unquestionably one of the most important institutions connected with the Navy. Its establishment, in 1884, represented a marked advance in naval development. Its work, even in the restricted sphere to which it has hitherto been confined, has been of immense benefit to the service, and it is of the highest importance that nothing should be done that will in any way interfere with its efficiency.

ORGANIZATION OF THE DEPARTMENT.

Under the authority conferred by section 419 of the Revised Statutes, which provides that "the business of the Department of the Navy shall be distributed, in such manner as the Secretary of the Navy shall judge to be proper and expedient, among the following bureaus: First, a Bureau of Yards and Docks," etc., I judged it proper and expedient to distribute anew certain branches of Navy Department business among the bureaus, and to that end issued a general order June 25, 1889, which order has subsequently undergone certain slight modifications.

At the time of my entry into office, and until the date of this order, the Navy Department, while it had the supervision of eight bureaus charged with special branches of manufacture or of supply of materials, contained no single office upon which devolved the detailed administration of the working establishment. The details of construction of ships and engines, of accounts, of the care of health, of the manufacture of guns and other articles of equipment were fairly provided for, but the details of administering the Navy, as an existing force, its vessels in commission, its officers and its crews, were scattered, without system

or coherence, among a variety of offices, bureaus, and boards. The assignment of officers to duty and, to a limited extent, the movements of ships in commission, were in charge of an "office of detail," at the head of which was the chief of the Bureau of Navigation, which Bureau was at the same time supplying compasses, chronometers, and navigating instruments, electric-light plant, ship's libraries, and other miscellaneous articles. The enlistment and assignment of seamen belonged to Equipment, which was also engaged in the supply of another list of miscellaneous articles, and in the manufacture of cordage, galleys, chains, and anchors. The direction of gunnery practice by ships in commission was in charge of Ordnance, whose all-important duties in providing the Navy with a modern armament left little opportunity for supervising the occupations of vessels at sea. The examination of these vessels on their return from a cruise was the duty of a board of inspection which was not associated with any bureau. The training of officers and men was in part conducted independently by the Naval Academy, and in other parts assumed by Navigation, Equipment, and Ordnance. To all these fragments of authority there was no central unity of direction, except such as could be given by the personal attention of the Secretary, to the exclusion of that broad and general supervision over all executive business which is required by a department as comprehensive as the Navy; and cases were not infrequent where a ship received simultaneous orders from three separate bureaus which were so directly contradictory that it was impossible to execute them.

With the obsolete vessels that until recently composed the whole naval establishment, the need of reform was not so apparent, since no mere system of administration could secure efficiency in a worthless fleet; and in view of the coming reconstruction of ships and armaments, any new regulations would be largely provisional. For this reason, the main effort of the Department for some time past has wisely been directed to supplying its most pressing wants. With the acquisition of modern ships and guns, however, as was pointed out by my predecessor, reform became an administrative necessity.

The plan adopted is that which would be dictated by common sense in the management of any business concern, namely, to put the details of the working establishment in one office, and to separate from that office the details of construction, manufacture, and supply. The fleet, including vessels, officers, and seamen—training, assignment, enlistment, inspection, and practice—falls under the Bureau of Navigation, while miscellaneous branches of equipment, and the supervision of subordinate offices connected therewith, or engaged in investigations not pertaining to administration proper, fall under the Bureau of Equipment. The Hydrographic Office, which would naturally be grouped under the latter class, is placed by the statute under the Bureau of Navigation, with which it has no logical connection, and it is therefore recommended that the law (section 431, Revised Statutes) be so amended

as to admit of its transfer to the Bureau of Equipment. Incidentally, the order also included the consolidation of branches of similar work which had grown up in different bureaus. Thus, electric lighting in general was under Navigation, and the supply of electric search-lights under Ordnance—a manifest absurdity, which has been corrected by placing all electric lighting where it properly belongs, under Equipment. The change has already produced the most beneficial results, and only requires this slight modification of existing law in reference to the Hydrographic Office to become a complete and homogeneous system.

Another change of equal importance was made by this order. As already suggested, the work of the Navy Department for some time to come must consist largely in the design and construction of modern vessels. Upon assuming charge of the Department I found that this work, so important, so complex, and involving such heavy expenditure, was conducted in much the same manner as the management of the working establishment—by separate bureaus acting independently and with no unity of direction except what was given by the Secretary himself. In the old days of sailing ships the constructor was rightly placed in charge of the whole vessel, for he built the whole vessel. There were no engines, and the battery had no influence upon the construction of the ship otherwise than as an article of heavy furniture. Now the constructor builds only the hull. The vital forces of the ship are given to her by the engineer. The hull can not be built until a definite conclusion has been arrived at as to the weight and disposition of the machinery, and that in turn, as well as the design of the hull, must be considered with reference to the weight and disposition of the guns. To attempt to reach a conclusion by means of three co-ordinate bureaus working independently, without unity of direction, and without any established organization by which differences may be harmonized and an agreement reached, must produce delay, confusion, changes of plan, and additional expense.

To remedy this serious defect the only plan which the law admitted was adopted; and it was provided in General Order No. 372 that the chiefs of the Bureaus of Yards and Docks, Ordnance, Equipment, Construction, and Steam Engineering should constitute a board having general supervision over the designing, constructing, and equipping of new ships for the Navy. The order brings together for consultation all the chiefs of bureaus who are concerned in the design and construction of the ship, her engines, battery, and equipment. The general plan of such designs must be agreed upon and a harmonious conclusion thus arrived at by all the independent agencies concerned before the detailed work is undertaken. Responsibility for delay can be placed at once where it belongs. It is not possible to say any longer that one bureau is waiting for another to reach a conclusion. Conclusions must be reached, and promptly reached, by the board.

In this connection I would suggest the propriety of a change in the name of the Bureau of Provisions and Clothing, which designation represents very imperfectly the functions of the Bureau. It might properly be called the "Bureau of Supplies and Disbursements." The words "and Recruiting" should also be dropped from the designation of the Bureau of Equipment and Recruiting.

It is recommended that authority be given for the appointment of assistants to all chiefs of Bureaus, in the manner now provided for the Bureau of Medicine and Surgery (Rev. Stat., sec. 1375).

The reports of the Bureaus, and of the Naval Academy, Naval Observatory, and Hydrographic Office, annexed hereto, will be found to contain many important and valuable suggestions.

ESTIMATES AND APPROPRIATIONS.

As was predicted by the Secretary in the annual report for 1883, the policy adopted at that time of discontinuing repairs on the old wooden vessels, and removing them gradually from the list, has brought about a material reduction in the ordinary expenses of the Bureaus of Construction and Repair, Steam Engineering, and Equipment. The extent of this reduction is reported by my predecessor. In furtherance of the policy of retrenchment thus initiated, it has been found possible to reduce the estimates for the support of the naval establishment, which are transmitted herewith, \$1,168,023.95 below those presented by the Department last year.

As appears from the report of the Bureau of Equipment, the general appropriation of that Bureau was practically exhausted on the 1st of March last. All work on equipment of vessels fitting out was therefore stopped, and a large proportion of requisitions for necessary supplies was disapproved, great embarrassment to the service resulting. Notwithstanding these retrenchments, the necessary expenditures, many of which, being for vessels on foreign stations, were beyond the control of the Department, resulted in a deficiency of over \$100,000.

The practice of appropriating an amount too small to keep up the work of the Department, and then working off in advance the appropriations of the next year by a provision in the annual bill that they "shall be immediately available" to cover deficiencies in the current year, will place the Department under the disagreeable necessity of asking for a new deficiency appropriation before the year is ended. The general appropriation for the Bureau of Construction, under the head of "Preservation and repair of vessels," for the year now current, was reduced in this manner \$150,000 before the year began, and it must therefore be supplemented by a new appropriation early in the session, unless the current work is to come to a stop.

A deficiency for the past fiscal year also exists in the appropriation "Pay of the Navy," which is stated by the Fourth Auditor of the Treasury to have been "partially caused by the payment out of that fund

of claims settled, under recent decisions of the Supreme Court, for longevity and for service on board receiving-ships."

There will also be a small deficiency in the appropriation "Pay miscellaneous, 1889," due to the causes which produced a similar deficiency last year, and which were thus explained by my predecessor in his annual report:

The expenditures under this head of appropriation can not always be controlled and kept within the amount specifically appropriated, as from it are paid all traveling expenses of officers or others on public duty, and the travel performed is dependent upon the necessities and requirements of the service.

The Department would call attention to the disadvantages of limiting, by act of Congress, the cost of vessels of specified requirements. It may be suitable in theory, but it works badly in practice. The sum named is necessarily conjectural to a large extent, and may be wide of the mark. After the type has been decided on, some particular feature of the design, involving a small excess over the limit, may make the difference between the efficiency and the inefficiency of the ship. An improvement not in itself expensive, yet which may be enough to turn a second-rate into a first-rate ship, may thus be prevented by the fixing of a limit. If the limit is too high it draws bidders up to it, if too low it postpones the contract to the next session of Congress. The construction of the *Newark* was delayed a year and a half pending a reference to Congress for an increased limit. More recently, in the case of the two 3,000-ton cruisers (Nos. 7 and 8) the cost had been limited to \$1,100,000, and the act authorizing them required that they should develop a speed of 19 knots. The lowest bid was \$125,000 in excess of the prescribed limit, and the Department being thus compelled to delay the work, or to do it in the navy-yards, adopted the latter alternative. It is therefore desirable that the act should appropriate for a certain number of ships, and indicate their type and general characteristics, leaving the Department to award contracts to the lowest responsible bidder.

In considering the economical administration of the Navy Department, a distinction must be drawn between the fixed charges, such as the pay of the Navy and Marine Corps, the charges for improvements authorized by statute, and the running expenses. The first are practically outside of departmental control. The second class includes appropriations based to a certain extent upon the Department's recommendations, but fixed in amount by Congressional action, prescribing certain specific works. These are the appropriations for the increase of the Navy, which are kept distinct from all others. A similar distinction, which has not hitherto been very carefully made, should set apart the expenses for permanent improvements at the navy-yards, and put them under this head. The third class includes the ordinary expenses of the eight bureaus and the miscellaneous and contingent funds. It is in this class, amounting to something like five millions a year, that careful administration is most necessary to secure economical results.

In the last class of charges, most of which are under the detailed administration of the bureaus, the Department intends to limit expenditures to the actual necessities of an efficient navy; but it believes that a navy, to be efficient, must be, to a reasonable extent, in a condition of readiness for war. The reduction in expenditure which followed the adoption of a fixed limit of repairs on wooden vessels may be maintained, in nearly all directions, until the wear and tear of service shall make repairs necessary to the new fleet, which it is to be hoped will not be for some time to come. On the other hand, one important item, that of coal, will necessarily show a large increase, as many of the new ships have little or no sail power, and all will be heavy coal consumers. This is a drain that must be met. A modern navy requires fuel no less than a railroad. It is the life of the cruising ship, and the cruising ships are the life of the whole establishment. Without a considerable increase, and that at no distant day, in the supply of coal, the new navy will stop running.

The following is an exhibit of the estimates of the Department proper and the several bureaus:

Department proper:

Pay of the Navy	\$7,656,312.00	
Pay, miscellaneous.....	240,000.00	
Contingent, Navy.....	7,000.00	
		<hr/>
		\$7,903,312.00

Bureau of Yards and Docks..... 1,796,836.32

Bureau of Navigation:

Proper.....	\$164,900.00	
Naval Academy.....	281,617.45	
		<hr/>
		446,517.45

Bureau of Equipment and Recruiting..... 1,128,625.00

Bureau of Ordnance:

Proper.....	\$279,224.00	
Increase of the Navy.....	3,971,500.00	
Gun plant, Washington navy-yard.....	145,000.00	
Submarine torpedo-boat.....	150,000.00	
		<hr/>
		4,545,724.00

Bureau of Construction and Repair:

Proper.....	\$1,194,972.50	
Increase of Navy.....	4,000,000.00	
		<hr/>
		5,194,972.50

Bureau of Steam Engineering:

Proper.....	\$1,000,070.00	
Increase of Navy.....	1,120,000.00	
		<hr/>
		2,120,070.00

Bureau of Provisions and Clothing..... 1,350,392.53

Bureau of Medicine and Surgery..... 159,500.00

Marine Corps:

Pay department.....	\$697,492.27	
Quartermaster's department.....	255,811.72	
		<hr/>
		953,303.99

Total..... 25,599,253.79

APPROPRIATIONS, EXPENDITURES, AND BALANCES, FISCAL YEAR ENDING JUNE 30, 1889.

Heads of appropriation.	Appropriations for fiscal year ending June 30, 1889.	Amount drawn, fiscal year ending June 30, 1889.	Balances undrawn, June 30, 1889.	Balances undrawn Octo- ber 31, 1889.
Pay of the Navy.....	\$7,082,404.00	\$5,515,376.09	\$1,567,027.91	\$715,878.10
Pay, miscellaneous.....	215,000.00	205,493.02	9,506.98	9,726.24
Contingent, Navy.....	7,000.00	1,954.38	5,045.62	4,933.53
Pay of the Marine Corps.....	673,807.66	561,274.42	112,533.24	54,261.41
Marine Corps:				
Provisions.....	62,185.05	59,691.55	2,493.50	244.12
Clothing.....	65,000.00	65,000.00		911.48
Fuel.....	18,000.00	17,943.00	57.00	
Military stores.....	10,786.50	10,732.50	54.00	55.08
Transportation and recruiting.....	12,500.00	12,214.60	285.40	199.50
Repairs of barracks.....	10,780.00	10,770.00	10.00	.20
Hire of quarters.....	6,560.00	6,560.00		49.97
Forage.....	3,500.00	3,500.00		7.10
Contingent.....	26,322.02	25,980.69	341.33	251.48
Pay, Naval Academy.....	104,013.45	103,700.00	313.45	1,281.67
Naval Academy:				
Special course.....	5,000.00	3,136.30	1,863.70	1,447.70
Repairs.....	21,000.00	14,614.91	6,385.09	2,551.08
Heating and lighting.....	17,000.00	16,496.20	503.80	20.27
Stationery.....	2,000.00	1,881.48	118.52	
Library.....	2,000.00	1,570.43	429.57	221.79
Chemistry.....	2,500.00	2,325.51	174.49	19.24
Stores.....	800.00	776.23	23.77	11.14
Materials.....	1,000.00	959.58	40.42	10.52
Board of visitors.....	1,500.00	1,500.00		26.84
Miscellaneous.....	32,000.00	29,410.69	2,589.31	13.46
Navigation and navigation supplies.....	90,000.00	84,364.32	5,635.68	315.16
Civil establishment, navigation.....	9,360.00	9,231.24	68.76	68.76
Contingent navigation.....	5,000.00	2,771.55	2,228.45	1,404.19
Naval War College.....	10,000.00	5,558.29	4,441.71	4,391.90
Ordnance and ordnance stores.....	253,000.00	233,057.61	19,942.39	9,476.03
Ordnance:				
Repairs.....	15,000.00	11,909.66	3,090.34	2,262.44
Civil establishment.....	24,525.00	23,847.54	677.46	667.63
Contingent.....	5,000.00	4,021.38	978.62	
Torpedo Corps.....	65,700.00	47,555.96	18,144.04	2,065.75
Equipment of vessels.....	625,000.00	535,551.77	89,448.23	100,360.45
Equipment and recruiting:				
Transportation and recruiting.....	30,000.00	28,373.23	1,626.77	655.91
Civil establishment.....	11,525.00	11,426.21	98.79	227.03
Contingent.....	15,000.00	8,156.08	6,843.92	1,844.35
Naval training station, Coaster's				
Harbor Island, R. I.....	14,000.00	10,550.24	3,449.76	437.51
Maintenance, yards and docks.....	165,000.00	150,152.84	14,847.16	1,599.81
Yards and Docks:				
Civil establishment.....	46,580.70	45,111.34	1,469.36	1,540.77
Contingent.....	20,000.00	19,087.16	912.84	7.39
Repairs and preservation at navy- yards.....	300,000.00	271,383.13	28,616.87	10,412.50
Naval Asylum, Philadelphia, Pa....	82,367.00	46,256.95	36,110.05	14,009.55
Medical Department.....	57,500.00	54,337.73	3,162.27	5.89
Naval Hospital fund.....	20,000.00	20,000.00		

APPROPRIATIONS, EXPENDITURES, AND BALANCES, ETC.—Continued.

Heads of appropriation.	Appropriations for fiscal year ending June 30, 1889.	Amount drawn, fiscal year ending June 30, 1889.	Balances undrawn, June 30, 1889.	Balances undrawn Octo- ber 31, 1889.
Medicine and Surgery :				
Repairs.....	\$25,000.00	\$16,411.14	\$8,588.86	\$2,290.51
Contingent.....	25,000.00	19,331.60	5,668.40	.....
Provisions, Navy.....	1,066,000.00	681,218.17	384,781.83	10,785.24
Provisions and Clothing :				
Civil establishment.....	67,287.56	65,510.39	1,777.17	2,611.45
Contingent.....	30,000.00	27,340.90	2,659.10	301.96
Construction and Repair.....	825,000.00	754,265.99	70,734.01	41,205.73
Civil establishment, construction and repair.....	20,162.01	19,024.95	237.06	558.59
Steam machinery.....	605,000.00	540,505.78	64,494.22	25,262.67
Steam Engineering:				
Civil establishment.....	17,018.63	16,923.13	95.50	857.84
Contingent.....	1,000.00	844.71	155.29	65.04
	12,928,624.58	10,437,902.57	2,490,722.01	1,027,344.06

As will be seen from the foregoing exhibit—

The amount of appropriations for the fiscal year 1889, including \$2,500 by appropriation warrant No. 10, for transportation and recruiting Marine Corps, 1889; also \$117,000, which was by appropriation warrant No. 13 transferred from ordnance and ordnance stores of said year; \$12,000 to "ammunition for the <i>Vesuvius</i> " and \$105,000 to "modern guns and ammunition," was.....		\$12,928,624.58
Drawn by requisition to June 30, 1889		10,437,902.57
Balance undrawn July 1, 1889.....		2,490,722.01
In hands of disbursing officers, June 30, 1889.....		307,034.37
		2,797,756.38
Drawn by requisition from July 1 to October 31, 1889		1,463,377.95
		1,334,378.43
Drawn by requisition from November 1 to November 21, 1889.....		171,192.34
		1,163,186.09
Due from pay of the Navy to officers and men.....		\$680,482.19
Due from pay of the Marine Corps to officers and men...		47,200.64
		727,682.83
Available balance		435,503.26

This balance will be decreased by liabilities incurred during the fiscal year 1889.

SALES OF GOVERNMENT PROPERTY AND VESSELS.

As will be seen from the detailed statement given in the appendix, the total amount deposited in the Treasury from November 1, 1888, to November 1, 1889, as receipts from the sale, at public auction, of condemned property pertaining to the Navy and Marine Corps, from sales

to other departments of the Government, from rents, interest, and premiums on exchange, was \$87,372.18, including \$16,000 proceeds of the sale of condemned vessels, which was covered into the Treasury by my predecessor. Of the total amount, \$27,835.06 were carried to the credit of the proper appropriations and \$59,537.12 covered into the Treasury in pursuance of law.

The sales at Norfolk in September last of old materials condemned by statutory board, under the provisions of the second section of the act of August 5, 1882, have not yet been reported, and are therefore not included in the above total. They will net about \$15,000.

No sales of old vessels have taken place during the year. In pursuance of the act of August 5, 1882, the *Juniata* and *Quinnebaug* have been stricken from the Navy Register as "unfit for further service," and in pursuance of the act of March 3, 1883, have been appraised. The sum of \$940.47, being the balance on hand of proceeds of sales of old vessels, transferred to me by check on my entry into office, has been covered into the Treasury.

The tug *Pilgrim* which was condemned and offered for sale in 1886, but for which no bids were made, was re-appraised July 6 last, and will shortly be re-advertised for sale.

Of the other wooden vessels the *Lancaster* has been recently surveyed and ordered to be repaired for use as a gunnery ship. The *Brooklyn* was also ordered to be repaired, but upon opening her up was found to be badly decayed, and a resurvey has been ordered which will probably result in her condemnation. The *Ossipee* has been surveyed, and as it will cost \$100,000 to repair her, including new boilers, it has been decided to remove the old boilers and use her as a sailing ship for the instruction of apprentices.

On the 1st of March last the Department had directed the sale of the *Monocacy*, in accordance with the recommendation of a board of survey. The sale was advertised to take place May 13. On May 7 the Department suspended the sale and ordered a resurvey. The board found the vessel was worth repairing, and that the repairs could be made at a reasonable cost. As a vessel of this class is indispensable for river service on the Asiatic station, and as the repairs, amounting to a little over \$10,000, would put her in condition for three years, the necessary order was issued, and the work is now completed.

The returns annexed to the report of the Paymaster-General show that the stock on hand at shore stations of articles belonging to the Navy June 30, 1889, amounted in value to \$16,486,885.24. The largest items in the list are: Guns and carriages, \$4,624,047.23; ammunition and explosives, \$2,292,120.05; oak timber, \$1,721,485.63; paints and chemicals, \$909,558.61, of which about \$800,000 is represented by a stock of niter acquired during or subsequent to the war for prudential reasons; gun equipment and implements, \$802,214.25; brass, copper, etc., \$541,070.69; chain, \$503,881.03.

These stores, which take up valuable space at navy-yards, and involve expense for preservation and custody, and a large part of which will never in any contingency be used, ought to be condemned under the act of August 5, 1882, section 2, not being such as "can be profitably used by re-working or otherwise in the construction or repair of vessels, their machinery, armor, armament, or equipment." The act requires that all such sales shall be at public auction, a method which is well adapted for small sales, but which gives opportunities for combinations of bidders against the Government, where the amounts involved are large. I recommend that this statute be amended so as to provide for sales in the discretion of the Secretary, either by public auction as at present, or by public advertisement inviting sealed proposals, in the manner now prescribed by law for sales of condemned vessels.

A copy of the statement of the Fourth Auditor particularizing the several deposits on account of sales during the year will be found in the appendix.

MARINE CORPS.

The report of Col. C. G. McCawley, commandant of the Marine Corps, advocates an increase in the number of privates now appropriated for. The full strength of the force as prescribed by law is 2,500, but the appropriation allows only 1,600. This number is not large enough for the work to be done, and as a result the men are overtasked and desertions are frequent. An additional difficulty is caused by the insufficiency of the appropriations for transportation and recruiting, which makes it impossible to open recruiting offices in the interior, and thus to fill up the ranks of the corps. A small addition to the amounts allowed would correct these evils.

CENTENNIAL INTERNATIONAL EXHIBITION AT MELBOURNE.

At the request of the State Department, Lieut. Adolph Marix was detailed for duty at the Centennial International Exhibition at Melbourne, Victoria, as disbursing officer and secretary of the United States Commission. He also served as superintendent of the United States court at the exhibition, and from January 15 until the close of the exhibition, March 31, 1889, he was in charge of the Commission, the Commissioner having returned home. The services rendered by Lieutenant Marix are favorably referred to by the Commissioner.

THE REVENUE MARINE SERVICE.

The recommendation is made by the Board of Visitors at the Naval Academy, that the officers of the Revenue Marine Service should be taken from the graduates of the Academy. This suggestion is sound and timely, but does not go far enough. The extravagance of maintaining in the United States what are practically two navies, one for

ocean service and the other for coast service, supplied by two naval academies, one of which discharges half of its pupils at graduating, has at different times been pointed out, and nowhere more forcibly than in the reports of the Secretary of the Navy for 1882 and 1883. The report for 1882 says:

In the interests of economy the change suggested is desirable. While the Navy proper is being reduced the Government is keeping up a revenue navy of 34 captains, 86 lieutenants, and 65 engineers; in all, 185 officers. Two training-schools are maintained to do the work of one. The Naval Academy at Annapolis is supplied with a full corps of instructors, and every appliance for the training at all times of 335 naval cadets. At the same time, another school is maintained at New Bedford for the training of Revenue Marine cadets, covering the same ground, only in a limited degree, and with imperfect appliances. The Revenue Marine cadets receive \$900 a year during their service at the school.

Recent legislation has provided that only a part of each graduating class at Annapolis shall enter the Navy, while the remainder shall be given a year's pay, and remanded to private life. All these young men, upon whom the Government has bestowed a gratuitous education, are well fitted for their profession, from which they are thus excluded; and by opening the cruising cutter service to these graduates of the Naval Academy the Government will save, at a single stroke, the whole cost of a duplicate establishment.

The Department therefore strongly recommends a consolidation of the coast-guard navy and the ocean navy. It is believed that no practical difficulties lie in the way of its accomplishment. The present Revenue Marine, composed of some two hundred officers, should be taken bodily into the naval service and organized as a separate corps, to be known as the Revenue Marine Corps of the Navy, subject in all respects to the laws, and entitled to all the privileges which attach to the naval commission.

The interests of the existing Revenue Marine officers being thus carefully guarded, their employment and emoluments will continue as at the present time. As vacancies occur at the foot of the list they should be filled, not by special appointment, but by the temporary detail of junior naval officers, thereby diminishing the number of cadets discharged each year from the graduating class at the Academy. As the numbers of the Revenue Marine Corps decrease, the number of junior officers of the Navy employed on the duty would increase, until, in the course of time, the corps would pass away by the operation of natural causes, such as retirement, death, and resignation.

As to employment, the officers of the Revenue Marine Corps, as long as it lasted, and those of the Navy supplying the places made vacant in the corps, would perform the duties now incident to the Revenue Marine. The harbor boats now used by the inspectors of customs, which do not require a special corps of officers, should remain, as at present, exclusively under the customs service, as the light-house tenders are under the Light-House Board. The cruising cutters, however should be officered and manned by a force fully incorporated in the naval organization.

The duties of the Navy and Revenue Marine are identical in general character, and differ only in their administrative objects. One polices the ocean, the other the coast. The seizure of smugglers, the only duty of the Revenue Marine that has direct relation with the collection of customs, is precisely similar to the duty of naval officers in seizing vessels engaged in contraband trade in time of war. Other duties of the Revenue Marine, such as the enforcement of the neutrality laws and the suppression of piracy and of mutinies in merchant vessels, are now actually imposed on and performed by the Navy in common with the sister service.

The rescue of distressed vessels and seamen on our coast is as much the duty of naval as of revenue officers, and the only reason why the former do not perform it is because they are not on the coast, or have no suitable vessels for the service. For the other miscellaneous duties of the Revenue Marine, such as the enforcement of the laws applicable to shipping, the prevention of unlawful traffic in fire-arms in Alaska, and the protection of the seal fisheries in Behring sea, naval officers are perfectly well fitted. Finally, in time of war both law and custom sanction the employment of the Revenue Marine in naval operations.

The practical identity of the services lies in the fact that both are nautical, and both are military. There is absolutely no reason for a distinction between them, and a consolidation would inure equally to the advantage of both; and it is believed that the officers of both services would regard the change with favor. The Revenue Marine would be placed on a substantial footing, absolutely the same as that of naval officers, and could not fail to find satisfaction in being connected with the past traditions and future development of the Navy. The junior naval officers, who would gradually obtain employment in the cutters, would find the service of great practical benefit, and the knowledge they would thus obtain of the pilotage of our own coasts and harbors would be an overwhelming advantage to the Government during their whole professional career. Finally, in the interests of a sound economy, the consolidation must sooner or later take place, and the sooner it comes the better it will be for the country, for the Navy, and for the Revenue Marine.

It is now eight years since the Navy entered upon its present course of development. The sixteen years that preceded this period were marked by the reaction and relaxation that naturally follow a costly and hard-fought war. The turning-point was reached with the beginning of the year 1882, and it is now possible to estimate at their true value the successive steps by which this eight years' development has been accomplished. The first was the rigorous limitation of repairs on the old wooden ships to a small fraction of their cost, and the removal from the list of those that could not be made serviceable within the limit. Without this bold and judicious measure the new navy would not yet have been commenced. The construction of efficient cruisers fol-

lowed at once. The closing of unnecessary yards and the concentration of work at those remaining in operation was another act of retrenchment which opened the way for a more profitable outlay. Out of it has grown the Washington naval gun-factory, a working establishment second in its way to no other in the world.

The investigations of the Gun Foundry Board of 1883-'84, of the Board of Fortifications of 1885-'86, and of the special committees of the Senate and House, combined with the efforts of the Department and the manufacturers, contributed to the same result, and brought about the domestication in the United States of the manufacture of steel armor and gun-forgings, and of machine and rapid-firing guns. The Bureau of Ordnance, in whose work these converging influences united, has now begun the supply of high-power cannon of its own design and make, which are fully equal to similar guns abroad. The construction of war ships has been continued successfully, the designs increasing in efficiency with every advance in the science of naval architecture.

A like progress has been made in naval administration. The establishment of the Office of Naval Intelligence and the employment of trained observers abroad in connection with it; the foundation of the War College, which has developed the study of problems of modern warfare in a manner at once scientific and practical; the consolidation of stores and accounts; and, it may be hoped, the introduction of unity of administration into the management of the fleet and of unity of purpose into the bureaus concerned in ship design, armament, engineering, and equipment, are important steps in the direction of reform. To these measures Congress, the Department, and, by no means least, the professional talent of the service itself, have all contributed. It is a work in which both the administrations covering the period have had their share, and the citizens of this country should congratulate themselves that its political parties, instead of attempting to detract from and belittle each other's contributions to naval development, are engaged only in a generous rivalry to see which can do the Navy the most good.

Notwithstanding the progress of the last eight years, it must not be forgotten that the fleet has still only a nominal existence. During the past year four ships have been added to the list, and seven have been or will shortly be removed. At no previous time in the present century has the country been relatively so powerless at sea. The wooden ships are a makeshift, and will soon cease to be even that. The old monitors are worse than useless. The force actually available at the present time comprises eight modern vessels, of no great fighting power because of their weakness for defense. The main force has yet to be authorized. Until the United States has a fleet of twenty battle-ships with coast-defenders, cruisers, and torpedo-boats in suitable proportions for efficient defense, and an establishment in such working order, as to administrative machinery, officers, men, reserves, and vessels, that it can be brought without delay into effective action, the country can not

consider that it possesses a Navy ; and a Navy it can never afford to be without.

The true principle for us to follow is that laid down by President John Adams in his message of 1800, when he said : “ Seasonable and systematic arrangements, so far as our resources will justify, for a Navy adapted to defensive war, which may in case of necessity be quickly brought into use, seem to be as much recommended by a wise and true economy as by a just regard for our future tranquillity, for the safety of our shores, and for the protection of our property committed to the ocean.”

B. F. TRACY,
Secretary of the Navy.

P A P E R S

ACCOMPANYING

THE REPORT OF THE SECRETARY OF THE NAVY.

No. 4.—DISASTER AT APIA, SAMOA.

REPORT OF REAR-ADMIRAL L. A. KIMBERLY.

APIA, SAMOA, *March 19, 1889.*

SIR: It becomes my painful duty to report to the Department the disastrous injury and loss sustained by the vessels under my command in the harbor of Apia during the hurricane which swept these waters March 15 and 16. When the gale commenced there were in the harbor the following men-of-war: U. S. ships *Trenton*, *Vandalia*, and *Nipsic*; H. B. M. ship *Calliope*, and H. I. G. M. ships *Adler*, *Olga*, and *Eber*. There were also a few merchant vessels and small craft. The *Nipsic* had the inner berth, and the *Trenton* (last to arrive) had the outer berth.

Indications of bad weather appeared during the forenoon of Friday, March 15, and at 1 o'clock on that day I commenced preparations to meet a gale by sending down the lower yards and housing topmasts. Fires were lighted and steam raised. By 3 o'clock the gale had developed. It blew hard during the evening, and about 8 p. m. we parted our port bower cable. During the night it blew with great violence, but with aid of steam the vessels kept in good shape till morning. At daylight we had hoped for a moderation of the wind, but were disappointed. The gale set in with renewed fury, and early in the forenoon it was evident that some of the inner ships were ashore and those nearer to us were riding uneasily. The flag-ship lost her wheel about this time. It carried away with a crash and seriously injured some of the helmsmen. Relieving tackles and spare tiller were applied promptly, but it was discovered that the rudder was broken, and soon it was entirely useless.

The wind by this time was blowing with hurricane force and the seas were very heavy. The ship had begun to make water during the early morning. The hand pumps were manned and all bilge pumps in the engine-room put on. The water gained and threatened to put out the fires; the greater part of it seeming to come in through the hawse pipes which are situated on the berth deck. Every effort was made to stop the entrance of water at this point, by jamming in bedding, and by putting waulking on the chains, and veering into the hawse pipes. It could be checked in this way but not stopped; for the violence of the seas was so great that it would force back everything that opposed it. All hands were set to bailing, and the handy billy rigged, but by 9.30 a. m. the fires had been put out and the men driven up from the fire-room. Work at the hand pumps and with the buckets continued from

this time throughout the gale, with the hope of being able to relight the fires and keep the ship afloat.

A little before noon the *Calliope* was seen to be very uneasy at her moorings, and soon she steamed towards us, having parted or slipped her cables, and making an effort to go out the harbor she came near colliding with us and steamed out in the face of the hurricane. In the afternoon, the wind having hauled a little, the flag-ship was more unsteady at her moorings and parted two chains, one soon after the other. We then drifted over towards the eastern reef, escaping the wreck of a merchant bark by the mere chance of her dragging as we approached her. We drifted until our stern was almost against the reef. Destruction seemed imminent, as the vessel was within a few feet of the reef for a long while and pitching heavily. We drifted in this position along the reef for a considerable distance until we came to where it turned more toward the eastward. Here we found smoother water and our remaining anchor seemed to hold quite well for a time. This position, however, put us directly in the hawse of H. I. G. M. S. *Olga*, which vessel had one of the smoothest berths in the harbor at this time. She was riding well and had control of her engines. Efforts were at once made to heave over the 8-inch rifle-gun from the fore-castle, to assist in holding, but it could not be done in time. We slowly drifted upon her, and she avoided us twice by skillful use of helm and engines, but soon after cut into our quarters, first one side, then the other, carrying away boat's rigging and quarter galleries, but not essentially injuring the hull.

During all this time the officers of the flag-ship made every effort to manage her by the storm sails and putting men in the rigging. We drifted by the port side of the *Olga*, and across to the western reef, dragging the anchor and tailing now on the western reef as we had before done on the eastern. Some of the wrecked vessels were now in plain sight; *Nipsic* well inshore on good bottom, stern to the seas; *Vandalia* sunk against the reef, masts standing and tops and rigging filled with men; spray and surf flying to their mastheads. *Eber* nowhere to be seen. *Adler* on her side, high on the reef. The *Olga* had turned for the shore and going ahead under steam and sail was beached on good bottom and in a good position, stern to the seas.

All this time the gale was blowing with unabated fury. About 6 o'clock we were expecting to strike the reef momentarily. It was directly under our stern; but, as on the eastern side, an under tow or current seemed to carry us along the reef and keep us just clear of striking. Thus we came on to where the *Vandalia* was lying, and it was evident that our stern would soon strike against her port side. As we approached her rockets were fired, carrying lines, with the hope of rescuing the people on her masts. This proved very successful, and the men from the main and mizzen were rescued first. Soon after we struck the *Vandalia* with violence, and her main and mizzen masts went by the board. We then swung gradually and settled into a position alongside of her, just touching the bottom, and our stern grazing a small wreck and the reef. The men were rescued from the foremast of the *Vandalia*, and thence on during the night we continued to beat upon the bottom and against the *Vandalia* with great force.

The wind during this (Saturday) night blew with hurricane force, squall following squall with hardly any appreciable interval. The seas, however, were not so high as they were further out, and we got through the night without additional serious misfortune.

Just before daylight the flag-ship was visited by two boats manned

entirely by natives, who carried lines to the shore. This was dangerous work, owing to the darkness, to the sea and current, to the reefs and wreckage, and to the difficulty of approaching the *Trenton* on account of the *Vandalia's* wreck.

The men were kept at the pumps and buckets without cessation, with a view to hauling off the ship, if possible, and keeping her afloat when the gale abated. In the morning the wind moderated. It was then ascertained that the propeller was missing. The ship had settled hard on the bottom, and the water could not be reduced; it was up to the engine-room platform and rising. Under these circumstances, and in the absence of any docking facilities or marine railway appliances and powerful pumps, the abandonment of the ship became necessary. Stores were gotten up as rapidly as possible, and the people got their effects ashore. Immediately thereafter the crew was set to work getting out and saving from her everything possible. On Monday the water was up to her gun deck, and she had settled a little on her port side. On Tuesday she had settled more to port and was still lower in the water.

The *Vandalia* is completely submerged, only her foremast and head-booms showing above the water. The *Nipsic* is lying in about 7 feet of water at low tide (rise and fall about 4 feet). She would probably have to be hauled astern some 500 feet to float her at high tide. She has lost her smoke-pipe, also her rudder, and her propeller is badly damaged. Her crew remain on board, and she keeps her bilges free of water by the steam-pump. I have ordered a board to investigate at once the possibility of saving the *Nipsic*, and to further investigate and report upon all circumstances connected with the loss and damage of the vessels by the gale. The report of this board will be forwarded by the first opportunity after its receipt by me. The crews of the *Vandalia* and *Trenton* are in barrack on shore. The *Calliope* steamed into the harbor this morning, showing signs of having experienced heavy weather. She goes to Sydney as soon as possible for repairs, and through the kindness of Captain Kane her diving outfit has been turned over to us, and it will be of the greatest assistance in saving stores. I commend his services to the Department, and trust that they will be regarded as worthy of recognition.

Lieutenant Wilson goes to Auckland to report the catastrophe to the Department by cable, and to charter a steamer to take to San Francisco the *Vandalia's* crew and others of the squadron who are sick and disabled. By the *Calliope* I send a duplicate dispatch to Sydney to be forwarded by the United States consul to the Department.

I have received the most valuable assistance from Malietoa Mataaafa, who has sent a large number of his men to help in getting stores and public property from the ships.

The *Calliope* when she went out the harbor carried 90 pounds of steam, making seventy-four revolutions, and then was just able to make headway against the gale; and when outside, during the period of four hours she made no headway, engines running at full speed.

I regret to report the following loss of life:

On the *Vandalia*, four officers and thirty-nine men, viz:

Capt. C. M. Schoonmaker.
Paymaster Frank H. Arms.
First Lieut. F. E. Sutton, marine corps.
Pay Clerk John Roche.
George Murrage, bayman.
B. F. Davis, engineer's yeoman.
M. H. Joseph, engineer's yeoman.

N. B. Green, bayman.
H. P. Stalman, bayman.
C. H. Hawkins, steerage steward.
C. E. G. Stanford, landsman.
W. Brisbane, cabin steward.
Joseph Griffin, first-class fireman.
M. Erickson, ordinary seaman.
Thomas Kelly, second-class fireman.

On the *Vandalia*—Continued.

W. Howat, coal heaver.
 C. P. Kratzer, ordinary seaman.
 Thomas Riley, landsman.
 John Kelly, ordinary seaman.
 Henry Baker, landsman.
 John Hantchett, sergeant.
 Frank Lissman, sergeant.
 E. M. Hammer, seaman.
 George Gorman, carpenter.
 M. Craigin, captain after-guard.
 William Brown, first quartermaster.
 T. G. Downey, paymaster's yeoman.
 Michael Cashen, corporal.
 Nicholas Kinsella, corporal.

H. C. Gehring, private marine.
 Adolph Goldner, private marine.
 Frank Jones, private marine.
 George Jordan, private marine.
 John Willford, private marine.
 Henry Wixted, private marine.
 Aylmer Montgomerie, private marine.
 John Sims, private marine.
 G. H. Wells, private marine.
 Charles Kraus, private marine.
 Ah Keau, cabin cook.
 Ah Pack, seamen's cook.
 Pen Dang, landsman.
 Yee Hor, ward-room cook.

On the *Nipsic*, seven men, viz:

Joshua Heap, apprentice.
 George W. Callan, apprentice.
 Henry Pontseel, coxswain.
 William Watson, first-class fireman.

David Patrick Kelleher, coal heaver.
 John Gill, seaman.
 Thomas Johnson, cabin steward.

On the *Trenton*, J. Hewlett (landsman) was struck on the head by the breaking in of a port, and died soon after.

During the entire time Captain Farquhar showed great care and good judgment in handling the ship through this terrific gale and never left the bridge. He was ably seconded by his executive and navigating officers, who did all in their power to save the ship. In fact, so far as I could observe, all the officers behaved extremely well under the trying circumstances and performed their duties cheerfully, effectively, and as well as could be desired.

This disaster I classify among the incidents and accidents inseparable from the prosecution of duty. Its magnitude, however, gives it a distinguishing feature which, fortunately, the service is rarely compelled to witness.

Captain Farquhar has demanded a court of inquiry. No disinterested officers are available here. I therefore respectfully refer the entire matter to the Department, and if further investigation is deemed necessary I should be pleased to have a court of inquiry ordered.

Very respectfully, your obedient servant,

L. A. KIMBERLY,
 Rear-Admiral, U. S. Navy,
 Commanding U. S. Naval Force on Pacific Station.

The SECRETARY OF THE NAVY.

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ADDITIONAL REPORT OF REAR-ADMIRAL L. A. KIMBERLY; CONDITION OF VESSELS.

UNITED STATES CONSULATE,
Apia, Samoa, March 21, 1889.

SIR: The *Nipsic* was off last night, and is now afloat without rudder or rudder-post, and her crew is engaged in trying to get up her chains.

The *Trenton* is sunk, the water coming over the port side of her gun-deck at high water. I think her back is broken. She might possibly be freed from water if we had the proper appliances—powerful steam-pumps, etc. She has no rudder, rudder-post, or propeller, and lies with

her deck slightly inclined to seaward. She lies alongside of the wreck of the *Vandalia*, which is shoreward of her. The latter vessel is a total wreck and broken in two. At high tide the water rises over her top-gallant fore-castle; only her foremast is standing. We are engaged securing moorings for the *Nipsic* and in wrecking the *Trenton* and *Vandalia*. A good deal of what we save might be sold at public auction, to save expense of storing and transportation. Our sick and injured are doing well. It would perhaps be well to send a wrecking vessel here later in the season, to save the *Trenton's* heavy guns, ammunition, etc. I have received from Capt. Henry C. Kane, Royal Navy, a diving suit and apparatus, and will use for all it is worth, but we ought to have another in case of accident to this.

I hope the Department will not forget Captain Kane's kindness to us in our distress; he commands H. B. M. S. *Calliope*, which vessel having but one boat, I gave to her one of our ten-oared cutters. As she did not consider it safe to lie here at this season of the year, she has sailed this morning for Sydney, where she will be repaired, as she was considerably damaged by the *Olga* colliding with her. Almost every vessel was at one time or another in collision with some other vessel, and a great deal of the damage which occurred was owing to this cause.

If I can save the *Nipsic*, which can be done if the weather permits, I will send her under convoy to Auckland to be docked and repaired. Another ship should be sent here for the purpose of convoying her, as the risk of an improvised rudder is too great to send her there alone. I have still to learn of the condition of her machinery and propeller, but shall be informed in the course of a few days.

Very respectfully, your obedient servant,

L. A. KIMBERLY,
Rear-Admiral, U. S. Navy,
Commanding U. S. Naval Force on Pacific Station.

THE SECRETARY OF THE NAVY.

NO. 8.—REPORT OF THE BOARD OF VISITORS.

UNITED STATES NAVAL ACADEMY,
Annapolis, Md., June 7, 1889.

SIR: The Board of Visitors to the Naval Academy has the honor to submit the following report:

The Board convened on the 1st instant, and organized by the election of Commodore George Brown, U. S. Navy, president, and Senator M. C. Butler, of South Carolina, vice president; Lieut. Richard Wainwright, U. S. Navy, secretary, he having been detailed for that duty by the Superintendent of the Academy.

STANDING COMMITTEES.

- (1) *Condition of admission to and discharge from the Academy.*—Hon. M. C. Butler, Hon. H. A. Herbert, Hon. C. H. Grosvenor, Commodore George Brown.
- (2) *Subjects of study and standard of scholarship.*—Hon. H. M. Teller, L. C. Garland, LL. D., General F. A. Walker.
- (3) *Grounds, buildings, and sanitary condition.*—Hon. William McAdoo, Governor J. A. Beaver, Hon. C. H. Grosvenor.
- (4) *Seamanship, ordnance, and navigation.*—Commodore George Brown, Governor J. A. Beaver, Hon. William McAdoo.
- (5) *Discipline, drill, practical exercises, administration and police.*—General S. L. Woodford, General F. A. Walker, Hon. M. C. Butler.

- (6) *Steam, mathematics, physics, and mechanics*.—Dr. T. C. Mendenhall, Prof. Oren Root, General F. A. Walker.
 (7) *English studies, modern languages, drawing, physiology, and hygiene*.—Prof. Oren Root, L. C. Garland, LL. D., Hon. H. M. Teller.
 (8) *Finance and library*.—Hon. H. A. Herbert, Commodore George Brown.
 (9) *Final report*.—Hon. C. H. Grosvenor, General S. L. Woodford, Dr. T. C. Mendenhall, Commodore George Brown.

General Stewart L. Woodford was elected orator.

Sessions of the Board were held daily during the continuance of the examinations.

CONDITIONS OF ADMISSION TO AND DISCHARGE FROM THE ACADEMY.

The Board, after careful consideration of the subject, unanimously recommends that the academic course be reduced from six to four years, and that at the end of four years the graduates be commissioned as ensigns. It also recommends that it shall be required by law that the designation of persons for appointment, and their alternates, to fill vacancies occurring from graduation, be made one year in advance when practicable.

The Board also recommends a change in the law fixing the maximum limit of age for entrance into the Naval Academy at twenty (20) years. In its opinion nineteen (19) years is the better limit.

The Board has made diligent inquiry in order that it might ascertain, if possible, the effect upon cadets of the law, first enacted in 1882, limiting the number of admissions into the Navy.

It was reasonable to suppose that some cadets, seeing no fair prospect of a commission, would become discouraged and cease to pursue their studies with diligence. There is testimony tending to show that, in some degree, this is true. The Board believes that the value of the course of instruction, both to those who reach graduation and to those who fail of graduation, is impaired by the painful smallness of the number of those who can reasonably hope to attain positions in the naval service.

While it appears that the morale, discipline, and scholarship of the Academy have improved in the last four years, yet the Board is confident that the intense competition which necessarily arises under the operation of the act of 1882 is inconsistent with an altogether healthful pursuit of the studies of the course.

It would be very desirable for the Government to find, if practicable, occupation for more cadet graduates than are now taken annually into the naval service. It seems to the Board that Congress might well consider the propriety of putting these young men, so far as may be, in the revenue marine service, filling all vacancies there by appointment from the graduates of the Academy. These would be so many more prizes for diligence, and certainly it would not be an undesirable thing to have naval officers acquire the knowledge of our coasts and approaches that would be attained in that service, the duties of which require constant watchfulness over every avenue and landing by which an enemy could approach from the sea.

If the number of those who are to be received into the service can not be increased, it would, in the judgment of the Board, be better that a much smaller number should be admitted into the Academy.

SUBJECTS OF STUDY AND STANDARD OF SCHOLARSHIP.

The Board finds:

(1) That no subject of study is embraced in the present course which is not essential or highly important in the education and training of naval cadets, under the general system prevailing.

(2) That the proportions according to which the aggregate time at the disposal of the academic board has been divided between the several subjects of study are, in general, very judiciously taken.

(3) That no subject which can be deemed essential to the proper education and training of naval cadets, under the general system prevailing, is now omitted from the course of instruction, excepting only international law, and the Board is unanimous and earnest in the opinion that this branch of study should be held to be absolutely indispensable.

Believing that it is not advisable to add anything to the present weight of studies in the Academy, it recommends that room be made for this branch of instruction through a reduction in the volume of work in this or some other department.

(4) The Board finds that, while the course of study at the Academy is severe, as it ought to be, the requirements of instruction are not excessive. After careful consideration the Board is satisfied that the demands upon the time and strength of the cadets are not greater than is consistent with health and mental soundness.

The Board's observation of the cadets, as well as the testimony of the medical officers of the Academy and other members of the corps of instruction, shows that the young men pursuing these studies are vigorous, active, vivacious, with a degree of mental spontaneity and physical alertness which could not be exhibited by men who had habitually been overweighted or kept under undue strain.

The Board notes, with gratification, the instruction given in the mechanic arts, and hopes that opportunity will be found for a large extension of these studies and exercises during the summer or otherwise, and the introduction of the cadets into the shops at an earlier period of the course.

GROUND, BUILDINGS, AND SANITARY CONDITION.

The Board heartily indorses the report of the Board of Visitors last year as to the excellent condition of the grounds and buildings; cleanliness and order are everywhere observable, and the good health of all at the Academy bespeaks its sanitary condition.

As recommended last year, a new boat-house for the storage of the steam-launches and boats has been appropriated for by Congress and is now being built. There is also in course of construction a new brick building to be used as a sail and rigging loft. This will do away with the use of the present frame building on the dock and lessen the danger of fire. These buildings will serve a useful purpose.

The Board again recommends that some use or disposal be made of the unused hospital building. It thinks that if no use can be found for the building by the Government the same should be sold.

The additional land adjoining the Academy grounds, for the purchase of which Congress provided at its last session, has not yet been bought, owing to the fact that the owners demand a larger sum than that appropriated for this purpose. Measures are now being taken to condemn this land to Government use under due process of law, and at a price to be thereby fixed.

The Board has been impressed, as were its immediate predecessors, by the necessity for additional houses for officers detailed for duty at the Academy, many of whom are now obliged to live, at no little expense, outside the Government reservation; therefore the Board unanimously recommends that additional quarters be furnished for the instructors of the Academy.

SEAMANSHIP, ORDNANCE, AND NAVIGATION.

The Board witnessed, with much interest, the drills and exercises of the cadets in practical seamanship on board of the *Wyoming*, the target practice with great guns on board the same ship, and the artillery and infantry tactics on shore.

In the exercises on board of the *Wyoming* the ship was gotten under way and steamed to a favorable position in the bay, the cadets performing all the duties usually required of seamen and the forces of the engine and fire rooms.

The exercises in making and shortening sail, sending up and down light masts and yards, and in the ordinary evolutions of handling ship were performed in a very satisfactory manner and with commendable spirit. The cadets labored under great disadvantages, due to the heavy spars, old-fashioned blocks, and poor-fitting sails. Such obviously imperfect appliances will not probably exist when the practice-ship, already appropriated for, is completed. That ship should be of the most modern type in all departments; she should be square-rigged on at least two of her masts, and she should have an extra suit of sails, especially for exercises.

In the department of ordnance the practical work shows evidences of careful training. The drills of artillery and infantry were creditable to the instructors as well as to the cadets. The target practice from the *Wyoming*, when under way, was most excellent in details and results. The regulation target was anchored, and the ship maintained a position about 1,200 yards from the target. The target was struck frequently, and of the many shots fired, but few, if any, would have failed to strike a small-sized vessel. It was particularly observable that the training and instruction of the cadets had been such as to give them that perfect confidence in their guns which is essential to good gunnery.

DISCIPLINE, DRILL, PRACTICAL EXERCISES, ADMINISTRATION, AND POLICE.

The discipline of the Academy is all that is required for a high order of military training. The regulations are necessarily exacting, but are so enforced by those charged with this duty as to establish pleasant relations between them and the cadets. The example shown by the officers of the Academy has a beneficial effect in this respect.

The amplest opportunities were afforded the Board to judge of the proficiency of the cadets in their various drills, which was found to be most gratifying and satisfactory, all movements being executed with the precision resulting only from a thorough personal understanding of the subject.

The system of practical exercises which has been adopted is commended, and in the matter of administration and police, after careful investigation and consideration, no changes suggest themselves.

STEAM, MATHEMATICS, PHYSICS, AND MECHANICS.

The reorganization of the course of study and practice at the Academy, in virtue of which those who enter the Engineer Corps of the Navy are selected at the end of the third year of their course, and are provided with special studies and exercises during the fourth year, makes it imperative that the facilities for work in steam-engineering be enlarged and amplified.

The equipment now available in this department, although excellent in its way, is much of it obsolete. Marked improvement in the construction of marine engines and boilers has been made since this equipment was supplied, and young men well drilled in the use and construction of the steam apparatus now at hand, would find themselves quite unable to manage easily and successfully the best engines of modern construction which are being placed in the new ships. It is, therefore, very important that a new triple-expansion marine engine, of the best type, be built for the use of the department, and that the boilers now in use be replaced by those of modern construction.

Some arrangement should also be made for absorbing the power of the engine by submerging the screw, if possible, or by other available method, so that the engine may be worked under conditions similar to those obtaining at sea.

It is also believed that the addition of a small stationary engine, especially designed and constructed for purely experimental purposes, would be of great value. With it should be provided suitable dynamometers for measuring its available horse-power; apparatus for carrying on evaporating tests, fuel tests, etc. Additional appliances are also needed for the better study of the properties of steam.

The machinery and equipment of the machine-shop are good and probably sufficiently complete for the demands likely to be made, but the facilities for wood-working should be enlarged, and it should be supplied with power. The blacksmith-shop should also be supplied with a power-blast for the forges.

The practical exercises of the cadets in the work-shops furnish evidence of excellent instruction and emphasize the importance of this feature of their course.

The modern war-ship is a vast and complicated machine. She is propelled by machinery, steered by machinery, her guns are loaded, directed, and fired by machinery. The mechanism by means of which all this is accomplished is intricate and often delicate, and its various elements are so related to each other that failure, although but temporary, of an apparently unimportant device to properly perform its functions might lead to a complete paralysis of the whole.

This fact makes the possession of mechanical ingenuity and skill one of the important qualifications of a successful officer, and it, therefore, seems to this Board that the cultivation of manual dexterity through work-shop practice might well be begun earlier in the course than at present, and a somewhat larger proportion of the summer devoted to it. The effect, both primary and secondary, of such practice is good, and its influence upon the work of the cadet in other parts of his course can not fail to be beneficial.

The circumstances under which the Board visited the Academy rendered an actual inspection of the methods in use in the various departments of instruction impossible. Without such actual inspection it is impossible to speak with certainty and confidence regarding the method. It is the sense of the Board that it would be well that a certain number of the Board of Visitors be designated to come to the Academy prior to the closing week of the academic year and examine the work in progress. Much information was gained, however, by interviews with the heads of these departments, and by the inspection of examination papers. Knowledge thus gained has led to the belief that, in the main, the instruction is thorough and efficient.

The course in mathematics is extensive and exacting, but not unnecessarily so, since it is the foundation, upon the integrity of which

depends a large share of the professional culture of the cadets. The instruction given is, in the main, excellent, but the scheme adopted in the division of the cadets into sections, and the subsequent instruction of these sections, is one of which the Board can not approve. While reluctant to express opinions in strong condemnation of methods which must have received the approval of the Academic Board, it can not refrain from declaring its belief that any system which restricts the instruction of the head of the department, naturally more experienced and capable than his assistants, to that section of the class which is highest in scholarship, is false in principle and pernicious in practice, under the conditions which exist at the Academy.

The advantage which, in the very beginning, is thus given to students who may enter a little ahead of their fellows, or who are a little more ready in recitation, or whose memory is more retentive, is likely to be held through the system of daily marks and averages, to which undue prominence may be given.

The existence of this system is, unquestionably, one of the reasons why so small a proportion of a class is graduated. In the judgment of the Board the so-called "electives," which are really "extras," should be given up so far as they take the form of recitations upon which marks are given which are allowed to tell upon the cadet's rank. Such time as can be spared by the better scholars should be devoted to practical exercises or to recreation.

The department of physics is, for the most part, well equipped, and as far as known to the Board the methods of instruction are in agreement with those adopted by the best institutions of learning. The subject is of great and growing importance to the naval officer, and an increase in the facilities for instruction along certain lines is demanded.

The extensive application of electrical apparatus on board ship for lighting and other purposes calls for the establishment at the Academy of an electrical plant similar to that in use on the best equipped vessels, so that the cadets may become practically familiar with its management. A lighting plant for certain of the buildings of the Academy, notably the study-rooms of the cadets, would not only be desirable on general principles, but would also be a valuable addition to the facilities for instruction in the physical department.

The system of change in instructors by detail from the active service of the Navy, while possessing advantages in some departments, is not calculated, in the opinion of the Board, to produce the best results in such a rapidly-expanding department as that of physics, and it is therefore recommended that a permanent assistant to the head of this department be provided for.

The course of study in applied mechanics is complete and thorough, but the addition of some appliances for the experimental study of the laws of elasticity, the elastic limit, elongation, and torsional rigidity of materials used in construction would be very desirable.

ENGLISH STUDIES, MODERN LANGUAGES, DRAWING, PHYSIOLOGY, AND HYGIENE.

The work in these departments, as evinced by the results presented to the Board, has been well conducted, when the narrow limits of time allowed are considered.

FINANCE AND LIBRARY.

The finances of the Academy seem to be well administered, the books correctly kept, and the system of checks and balances adopted to pre-

vent improper expenditures appears to be efficient, and the interests of the Government and the cadets are carefully guarded, and the new system of accounts adopted during the last winter works admirably.

The library is well arranged, neatly kept, and is, altogether, well managed. The new building is admirably adapted to the purpose for which it was built and will afford ample room for many years.

Very respectfully, your obedient servants,

GEO. BROWN,
Commodore U. S. N., President.

M. C. BUTLER,
U. S. Senate, Vice-President.

H. M. TELLER,
U. S. Senate.

H. A. HERBERT,
House of Representatives.

WM. MCADOO,
House of Representatives.

FRANCIS A. WALKER,
President Massachusetts Institute of Technology.

T. C. MENDENHALL,
President Rose Polytechnic Institute.

L. C. GARLAND, LL. D.,
Chancellor of Vanderbilt University.

OREN ROOT,
Professor of Mathematics, Hamilton College.

STEWART L. WOODFORD.

Hon. B. F. TRACY,
Secretary of the Navy.

ANNUAL REPORT

OF

THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, D. C., November 15, 1889.

SIR: The first annual report made by any Secretary chronicles and discusses chiefly, as a rule, those acts performed under the direction of his predecessor; but at present, in addition to this labor (by no means light to one connected with the service so short a time), the Secretary of the Interior has to record several very important events that have taken place in his Department during the present administration. Some of these have been consummated since the termination of the last fiscal year; but nevertheless it is deemed proper to recount their progress up to the time of this report.

Your attention is first called to these as they successively occurred: The opening of Oklahoma; the successful negotiation of a treaty with the Sioux Indians of Dakota, and the advent into the Union of the four new States, North Dakota, South Dakota, Washington, and Montana, none having entered previously for thirteen years.

OKLAHOMA.

DOMAIN.

Congress, by the act of March 1, 1889 (25 Stats., 735), ratified an agreement entered into by the then Secretary of the Interior on behalf of the United States with the duly authorized delegation of the Muscogee or Creek Nation of Indians, whereby, in consideration of \$2,280,857.10, these Indians ceded to the United States complete title to the west half of their domain, containing 3,402,450.98 acres, lying in the Indian Territory.

By section 12 of the Indian appropriation act of March 2, 1889 (25 Stats., 1004), the Seminole Nation of Indians, in consideration of \$1,912,942.02, released and conveyed to the United States all their

title and claim to certain lands in the Indian Territory ceded by these Indians to the United States by article 3, treaty of 1866 (14 Stats., 756), containing an area of 2,037,414.62. Thus the aggregate of these two cessions is 5,439,865.60 acres. By the thirteenth section of this appropriation act, provision was made that the lands so acquired, except the sixteenth and thirty-sixth sections, should be opened for settlement by proclamation of the President, and disposed of to actual settlers under the homestead laws only. But it was found upon careful examination that of all these lands so acquired 3,552,064.13 acres were in the possession and occupancy of various other Indian tribes, under laws treaties, or executive orders, and that only 1,887,796.47 acres were unoccupied and in condition to be opened.

The proclamation required by the law was issued by the President on March 23, 1889, in which the boundaries of the unoccupied portion of the land were carefully described. It was opened to settlement at and after the hour of 12 o'clock noon of the 22d day of April following. This portion of territory was surrounded entirely by other lands in possession of Indian tribes, and was inaccessible, necessarily, except by passage over these reservations. Among these was the "Cherokee Outlet," stretching along the northern border, some 60 miles wide, and extending to the southern line of Kansas.

WANT OF TERRITORIAL GOVERNMENT.

Unfortunately Congress had prepared no system of government for this domain of Oklahoma, such as other Territories enjoy. There was neither governor nor secretary, neither United States commissioner, nor notary public, nor justice of the peace. The jurisdiction, it is true, of the United States courts of Texas, of Kansas, and of Arkansas extended over this domain as well as over much other territory from which this had been taken; but these courts were at a great distance from Oklahoma, and had jurisdiction only of crimes punishable by death or imprisonment at hard labor. There was established also by the act of Congress approved March 1, 1889 (25 Stats., 784), a United States court, whose jurisdiction extends over the whole Indian Territory, bounded by the States of Kansas, Missouri, Arkansas, and the Territory of New Mexico, to which is given exclusive original jurisdiction over all offenses against the laws of the United States committed within the Territory, so defined, not punishable by death or imprisonment at hard labor, and in all civil cases between citizens of the United States residents of the Indian Territory, or between citizens of any State or Territory therein and any citizen or person or persons residing or found in the Indian Territory, when the value of the thing in controversy, or damages, or money claimed, amounts to \$100 or more, or where the controversy arises out of mining rights not exceeding in value \$100; but the jurisdiction does not extend to controversies between persons of Indian blood only.

Under this same act an attorney and marshal for this Territorial court were legally appointed, the marshal having power to appoint one or more deputies, having the power to perform the like duties and be removable as other deputy marshals. There were two terms of the court to be held, each at Muscogee, in the Territory, on the first Monday in April and September, and such special sessions as might be necessary for the dispatch of the business of the court at such time as the judge might deem expedient, with power of adjournment. The marshals of the other United States courts located in the surrounding States also had power to enter and serve process within Oklahoma for offenses where, as above mentioned, those courts had jurisdiction. Beyond this, very defective system for a new settlement, where many contentions do not arise to the amount of one hundred dollars in value, there is no law to be judicially administered, and no one but a marshal of a distant United States court with executive power; and this is, or should be, limited by his writ.

THE LAND OFFICES.

At the same time with the proclamation and by force thereof, there were established two land offices, one at Guthrie and the other at King Fisher stage station, to provide a site for each of which a small portion of land was reserved. In preparation for the opening of these there were appointed registers and receivers for the respective offices, experienced clerks were sent out from the General Land Office to assist in the opening business, and two inspectors were commissioned to have the land-office buildings erected and to supervise and direct everything that would tend to the effectual establishment and peaceful preservation of general law and order.

Upon due request, a military force also was detailed by the Secretary of War to keep the people on the northern boundary of the Cherokee outlet, and beyond the boundaries of Oklahoma, until noon of April 22. For, upon the proclamation being made that this territory would be opened, many thousands of citizens had gathered upon its borders, each eager to gain an early and profitable claim under the homestead laws. Under instructions from this office, on consultation with the Secretary of War, Mr. Pickler, one of the inspectors mentioned, proceeded to his task promptly, had the buildings for the land offices prepared for erection, placed upon wagons, and conveyed into the Indian Territory ready for "the opening;" and upon the stated day the offices were opened, the land officers and their clerks were in their places, the business of the Government was promptly commenced and has ever since been performed.

The great body of the people, with that respect for law which marks our citizens, awaited the hour allowed for their advent into the Territory; those to the north, in the mean time having been permitted to cross over the Cherokee outlet to the northern border of Oklahoma

itself. When the hour fixed by the proclamation arrived these great multitudes rapidly advanced; some by railroads, some by private conveyances, some on horseback, and many on foot, and seized and occupied their homesteads literally upon the run. Although, of course, the rush was very great and the desire of each person was to secure the best claim possible, it is a most honorable and memorable fact that the opening of so large an amount of land was attended with the loss of but very few lives, and these, two or three, occurred from personal combats. It may be said without the least exaggeration that between the hour of noon and the setting of the sun there were established in this domain towns and cities, each of several thousand inhabitants, and that a great part of the whole Territory was claimed and settled upon. The seed of these hours of planting has already developed there into wonderful results of Christian American civilization.

ILLEGALITIES.

But the observance of law was not universal. It is to be deplored that while this great body of our people were obeying the laws, and patiently submitting to a military patrol force they could have overpowered, there had crept into the Territory a number of individuals who, before the hour appointed, selected town-sites and homestead claims, and, by this illegal opportunity, to the great disadvantage of others, attempted, at the appointed hour of noon, to establish these sites and claims in defiance both of the proclamation and the statute under which it was framed, which latter reads as follows:

* * * Until said lands are opened for settlement by the proclamation of the President, *no person shall be permitted to enter upon and occupy the same*, and no person violating this provision shall be permitted to enter any of said lands or acquire any right thereto.

One town site was thus illegally attempted to be laid at Guthrie, and certain valuable quarter sections around it to be secured by the same persons who had seized upon the town site; and it was claimed that even a number of the United States officers themselves, who had been permitted to enter the Territory for the purpose of preserving the peace, or otherwise officially acting, took advantage of the situation to claim tracts of land they had selected before the hour allowed, or connived at the illegal actions of others in this respect. These others had obtained entrance under one pretense or another. But inasmuch as these questions may yet come before the Secretary of the Interior for decision, the matter will not be here further discussed than to say there should, in my judgment, be no legislation ratifying any acts these law-breakers have done in disregard of justice and fair treatment and to the injury of the law-abiding citizens.

MUNICIPAL GOVERNMENT.

But in addition to those from a disregard of this prohibition of the proclamation there arose other difficulties affecting titles and good gov-

ernment from the want of established laws. These concern particularly the titles of the town sites.

Section 13 of the act of March 2, 1889, contains the following provision respecting town sites in Oklahoma:

The Secretary of the Interior may, after said proclamation and not before, permit entry of said lands for town sites, under sections 2387 and 2388, Revised Statutes United States, but no such entry shall embrace more than one-half section of land.

Inasmuch as the two sections just mentioned designate certain town or other officials who alone can apply to make town-site entries, and as no Territorial or State government, having authority to provide for such officials exists in the Territory, it has been held by the Commissioner of the General Land Office that no such entries can be made there until further legislation by Congress.

The sections last above referred to require that to effect a town-site entry the town shall be incorporated, in which case the entry may be made by the corporate authorities, for which the mayor may act; or if the town is not incorporated that the judge of the county court for the county in which said town is situated may make entry. But as there are neither laws for incorporating town nor county organizations existing in Oklahoma, it does not appear possible for entries to be effected under said sections. The Commissioner of the General Land Office, however, directed the register and receiver at each of the land offices to report the same and await further instructions before allowing entries. The subject will be found discussed at length in his report.

Thirteen applications for town-site entries had been made up to the 30th of June in the Guthrie district and seventeen in the King Fisher Station district, making thirty in all in the Territory. Of these applications eight have been rejected by the Commissioner of the General Land Office on account of gross informality, and the twenty-two remaining were without definite action.

Immediately upon the opening of the Territory, on these sites there grew up villages, towns, and I may say cities.

POPULATION OF OKLAHOMA.

A careful estimate, based upon the judgment of reliable men of the Territory, makes the present population of Oklahoma, in round numbers, 60,000, of which 20,200 persons are distributed among twenty-eight towns, the largest of which are—

Guthrie (including East and West Guthrie and Capitol Hill)	8,000
King Fisher and Lisbon	3,000
Oklahoma City (including South Oklahoma City)	5,000

The Territory contains twenty-nine schools and thirty-eight churches and publishes twenty-two newspapers. The number of schools and churches does not include a few that are outside of town limits, data as to these not being readily obtainable.

At the largest of these towns there has been organized municipal government by the voluntary action of the citizens. From what has been said it can be perceived that there has been no law other than that of self-protection upon which these so-called municipal governments rest. Nevertheless there are mayors, city councils, tax-collectors, and city marshals and a court in the nature of an arbitration board; but it is obvious this must all rest upon a common consent and the right of the sovereign Government to preserve the peace in this unorganized domain.

Affairs have so far proceeded with great regularity and with a degree of quietude little to have been expected from the conditions under which the domain was opened. The reason of its being opened at all, without waiting for a definite government, was because there had already gathered on the borders, in anticipation of the event, many thousand persons who claimed that it had been understood that as soon as the Territory was paid for it should be given to the settlers. This claim both the action of Congress and the public press gave great reason to be maintained. It was feared there would be bloodshed were the Territory not opened, and it is doubtful if the troops would have been able to restrain the people from attempting at that time to acquire settlements upon these lands.

The evils that have resulted from the opening have so far been light compared with what probably would have been the result had the proclamation not been made; but it is obvious, and I hereby recommend to your most serious consideration and recommendation to Congress, that a Territorial government should be established, with the usual officers to rule over this domain and the people thereof. It would be testing the reverence for law and the good morals, of even Americans, beyond prudence or reason to leave them in their present condition longer than necessary; and the use of the military there should not be resorted to a day longer than the protection of life and property demands, where there is no law judicially administered. Among the first acts of Congress should be one formulating a system of government for a Territory and such curative acts as may be deemed best; providing courts of minor original jurisdiction, as well as the higher courts near the center of population; regulating towns and cities, and establishing the predominance of civil law.

Of course contests over the land entries, etc., will in due course of procedure come before the local land officers, the Commissioner of the General Land Office, and before the Secretary of the Interior for final adjudication; but even these questions might be greatly lessened and the labors of officers much lightened by the establishment of some legislative rule by which they are to be adjudged.

THE SIOUX COMMISSION.

The Sioux Commission has not yet made its report, but its work having been conducted largely under supervision of this Department, I am able to state its progress and the accomplishment of its purpose. It has acquired the consent of the Sioux Nation to the act of Congress whereby a vast domain will have been transferred to the United States upon the payment promised therefor. The Commission is composed of Hon. Charles Foster, of Ohio, chairman; General George Crook, of the United States Army; and the Hon. William Warner, late member of Congress from Missouri, who entered upon the discharge of their duties with enthusiasm and prosecuted them amid very great difficulties and with remarkable success.

This Commission was originated, it may be said, under two separate acts of Congress, both dated March 2, 1889. The one (25 Statutes, page 888) entitled "An act to divide a portion of the Sioux Nation of Indians in Dakota into separate reservations and to secure the relinquishment of the Indian title to the remainder, and for other purposes."

Under this act, by section.28 it was provided:

That this *act shall take effect* only upon the acceptance *thereof* and consent thereto by the different bands of the Sioux Nation of Indians, in manner and form prescribed by the twelfth article of the treaty between the United States and said Sioux Indians concluded April twenty-ninth, eighteen hundred and sixty-eight, which said acceptance and consent shall be *made known* by proclamation by the President of the United States, upon satisfactory proof presented to him that the same has been obtained in the manner and form required by said twelfth article of said treaty; which proof shall be presented to him within one year from the passage of this act, and upon failure of such proof and proclamation this act becomes of no effect and null and void.

By the twenty-ninth section it was provided:

That there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of twenty-five thousand dollars or so much thereof as may be necessary, which sum shall be expended *under the direction of the Secretary of the Interior*, for procuring the assent of the Sioux Indians to this act provided in section twenty-seven.

Evidently the designation of section twenty-seven was a clerical error, as it was section twenty-eight that provided for obtaining this assent, and twenty-seven had no relation to the matter.

The other act was the appropriation bill (25 Stats. U. S., 1005), approved March 2, 1889.

Therein it was provided:

That the *President of the United States* is hereby authorized and empowered to appoint three commissioners for the purpose of entering into *negotiations and agreements* with the Sioux Indians occupying the great Sioux Indian Reservation in Dakota for a full and complete cession and relinquishment to the United States of a portion of their reservation, and to divide the remainder into separate reservations, and for such other purpose as they may find necessary touching said reservation; and *such agreements*, when made, *to be by them submitted to the first session, Fifty-first Congress,*

for ratification; and to carry out this provision the sum of twenty-five thousand dollars, or so much thereof as may be found necessary, to be expended under the direction of the Secretary of the Interior, is hereby appropriated, this amount to be immediately available: *Provided*, That the pay of such commissioners shall not exceed ten dollars per day exclusive of traveling expenses.

These two acts concerning the same subject-matter, passed on the same day, with an appropriation in each of \$25,000, were deemed to be substantially one act, and to be carried into effect in such manner as would best serve the purpose in view; and it was thereupon considered to be the best plan for the President of the United States to appoint the commissioners named in the appropriation act, which was accordingly done, the commissioners being the persons already named, who, as soon as they were qualified, were made the instruments for procuring the assent of the Sioux Indians to the act first above mentioned.

Thus it was possible for the commissioners, first, under the instructions of the Secretary of the Interior, to procure the assent of the Sioux Indians to the act first mentioned in the manner therein provided; or, failing in that, to be subject to further instructions for the purpose of carrying into effect the provisions of the appropriation act.

Thereupon instructions were given by the Secretary of the Interior as to the manner of submitting the act for procuring the assent of the Sioux Indians, and the Commission acted directly under these instructions and no others.

The act was thus submitted at the different agencies; was fully expounded to the Indians there assembled; and, after a long discussion and much hesitation, extending over some weeks, the same was assented to by more than three-fourths of the Indians, as required under the act.

The full purpose of both acts having thus been attained, the Commission did not pursue its labors further, and now remains to be dissolved after its report to the President, and when he may become convinced upon satisfactory proof that the work has been accomplished in the manner and form required by the twelfth article of this statute, or, if deemed necessary, to report to Congress the action taken and the results attained.

The total amount of land of this reservation thus ceded to the United States is about 9,000,000 acres. Most of it must yet be surveyed, and contracts are now being made for this purpose so that it may be opened to settlers at an early day.

By section 21, of chapter 405, March 2, 1889 (25 U. S. Stats., 896), all this land, outside the separate reservations, is restored to the public domain, except three islands named, severally, American, Farm, and Niobrara Islands, and shall be disposed of by the United States to actual settlers only under the provisions of the homestead law, (except section 2301 thereof, which relates to former right to pre-empt), and under the law relating to town sites; provided that each

settler under the homestead act shall pay for his land, in addition to the fees, \$1.25 for all land disposed of within the first three years after taking effect of this act; and the sum of 75 cents per acre for lands disposed of the next two years following thereafter, and 50 cents per acre for the residue; and shall be entitled to patent according to said homestead laws and after full payment for said lands; but the rights of honorably discharged soldiers and sailors in the late civil war, under sections 2304 and 2305, Revised Statutes, shall not be abridged except as to said sums. It is further provided in said act (p. 897) that any conveyance of said lands so taken as homestead, or any contract touching the same or lien thereon, created prior to the date of final entry, shall be null and void.

There are other provisions relating to the general subject it is not necessary to cite here.

There will be the same pressure by the people to occupy these desirable lands that was felt at Oklahoma, but inasmuch as this territory is within the boundaries of South Dakota, it will not be without government, as was Oklahoma, and no great difficulty is anticipated upon its being restored to the public domain. It is to be remembered that the season for plowing and planting in this portion of Southern Dakota is much earlier than is generally known, the plowing commencing as early as February, and the planting completed by the end of March. These facts would seem to require an earlier proclamation, and by that proclamation land-offices must be established as authorized by act of Congress.

I think it my duty in connection with this work to compliment highly the energy, intelligence, and courage with which the commissioners performed their labors. There are no Indians within our borders that have more ability, intelligence, and shrewdness than the Sioux, of Dakota. In war and peace they have shown themselves to be formidable opponents to the white man, and in the recent negotiations they met the Government at every point with strong arguments and diplomacy of a high order. They yielded, however, to the logic and persuasion of the commissioners, who were indefatigable in presenting to them the favorable features for a cession; fortunately, it may be said, for the great State within which the reservation lies. But not alone will South Dakota and the neighboring country be advanced thereby; the Sioux will also be much benefited, for the breaking up of this great nation of Indians into smaller parts and segregating from the national domain separate reservations for each of said parts marks a long step toward the disintegration of their tribal life and will help them forward to their lands in severalty; settling down to civilized habits and pursuits and earning their support by their individual daily labor.

The census of the Sioux Nation of Indians, for which provision is made by a clause in the Indian appropriation act of March 2, 1889, is now being taken by a special agent appointed for that purpose.

THE FOUR NEW STATES.

By an act of the last Congress (25 Stats., 676), entitled "An act to provide for the division of Dakota into two States, and to enable the people of North Dakota, South Dakota, Montana, and Washington to form constitutions and State governments and to be admitted into the Union on an equal footing with the original States, and to make donations of public lands to such States," approved February 22, 1889, was inaugurated the opportunity which has been gladly improved by the people of the Territories named, and has resulted in the entrance, of four new States into the Union. The history of this transition should have place in this report, as up to the admission of the States the responsibility for the welfare, peace, and protection of these Territories rested largely upon the Secretary of the Interior, under the direction of the President.

By proclamation of the governors of the Territories named, an election was ordered of delegates to conventions in each of the proposed States, to be held on the Tuesday after the second Monday in May of the present year, which proclamation was issued on the 15th of April. These delegates met at the seats of government of each of said Territories (except the delegates elected in South Dakota, who met at the city of Sioux Falls) on the 4th day of July, and, after organization declared, on behalf of the people of said proposed States, that they adopted the Constitution of the United States, and, as they were thereupon authorized to do, formed constitutions and State governments for the proposed States respectively.

As provided it might be, however, at the election for the delegates to the constitutional convention in South Dakota a majority of votes was cast for the Sioux Falls constitution, and it thereupon became the duty of the convention which assembled at Sioux Falls to resubmit to the people of South Dakota, for ratification or rejection at the subsequent election, the constitution framed at Sioux Falls and adopted November 3, 1885. The constitutions adopted by the conventions were, as required, submitted at an election held on the first Tuesday in October, together with certain articles and propositions separately submitted.

Upon the certificates of the several governors stating that the election returns showed a majority of legal votes cast had been for the constitution in each proposed State, the President having found said State governments republican in form and that all the provisions of the act had been complied with in the formation thereof, by appropriate proclamations declared these several commonwealths admitted into the Union on equal footing with the original States. North Dakota and South Dakota were thus admitted November 2, Montana November 8, and Washington, November 11, 1889.

The admission of these States will add to the Senate of the United

States eight Senators and to the House of Representatives five members. The State of Washington contains an area of 38,726,400 acres, and has a population of 275,000. The State of Montana contains 93,273,600 acres, with a population of 185,306. The State of North Dakota contains an area of 45,696,000 acres, and has a population of 271,000, while South Dakota contains 49,708,800 acres, with a population of 379,000. The new States are all intersected by one of the great railroad arteries running to the Pacific, and by their mineral and agricultural resources promise to become among the wealthiest in the Union.

It is unnecessary to comment upon the importance of so great an advance of the Republic as is exhibited by this increase of States. No hardier or more intelligent people can be found in any portion of the country than have been carried to these new fields of enterprise by their energy and love of freedom. Their attachment to the Union is unquestionably as strong as that of the people of the older States, and although they may be now distant from the present great commercial markets, their love of the nation will not be diminished, and it may be safely said that but few years will pass before the center of population will have advanced quite to their own borders.

During the summer that the elections for these four new States were held, the Territories of Idaho, Wyoming, and New Mexico adopted constitutions ready to become States also, if acceptable to Congress.

CHEROKEE COMMISSION.

Before proceeding to review and present the business of the different bureaus of the Department, in their order, it is deemed desirable to report progress under the Cherokee Commission; particularly as the results of the labors of this Commission will be connected with Oklahoma, and may add more territory to that district, all to be brought under one territorial government.

This Commission is established under the same act that authorized the opening of Oklahoma. (Approved March 2, 1889, 25 Stats. U. S., p. 1005.)

It is authorized to negotiate with the Cherokee Indians, and with all other Indians owning or claiming lands lying west of the ninety-sixth degree of longitude in the Indian Territory, for the cession to the United States of all their title, claim, or interest of every kind or character in and to said land, and any and all agreements resulting from such negotiations shall be reported to the President, and by him to Congress at its next session, and to the council or councils of the "nation or nations, tribe or tribes, agreeing to the same for ratification;" and it is—

Authorized to submit to the Cherokee Nation the proposition that said nation shall cede to the United States, in the manner and with the effect aforesaid, all the rights of said nation in said lands upon the same terms as to payment as is provided in the agreement made with the Creek Indians of date January nineteenth, eighteen hundred and eighty-nine, and ratified by the present Congress; and if said Cherokee

Nation shall accept, and by act of its legislative authority, duly passed, ratify the same, the said lands shall thereupon become a part of the public domain for the purpose of such disposition as is herein provided, and the President is authorized as soon thereafter as he may deem advisable, by proclamation, to open said lands to settlement in the same manner and to the same effect, as in this act provided, concerning the lands acquired from said Creek Indians, but until said lands are opened for settlement by proclamation of the President, no person shall be permitted to enter upon and occupy the same, and no person violating this provision shall be permitted to enter any of said lands or acquire any right thereto.

By this act the President is also authorized to establish land districts, not to exceed two, and appoint the usual registers and receivers.

The Commission selected consisted, when it began its work, of Gen. Lucius Fairchild, of Wisconsin, chairman; General John F. Hartranft, of Pennsylvania, and the Hon. Alfred M. Wilson, of Arkansas. But since the lamented death of General Hartranft, his place has been filled by Hon. Warren G. Sayre, of Indiana.

They have visited the Indian Territory, and have been engaged in preliminary conferences and correspondence with the various tribes of Indians claiming the land. There seems to be a desire on the part of most of them to relinquish their property for the price which the Commission is willing to offer; but the Cherokees have not yet shown a disposition to cede their lands at any price. It has come to the knowledge of the Secretary, through the Commission and otherwise, that Principal Chief Mayes, of the Cherokees, has advocated a continuance of a lease for grazing upon the lands within the "Cherokee Outlet," rather than to transfer that property, or any claim that the Indians may have on it, to the United States.

The history of the tract called the Cherokee Outlet, which is the principal portion of the land to be opened, is given in a letter addressed to the Cherokee Commission, dated October 26, 1889, and hereto annexed. It is that portion of land heretofore mentioned which lies between Oklahoma and the State of Kansas, and contains, after deducting all previous portions thereof assigned to other Indians and for which the Cherokees were paid, over 7,000,000 acres; which at the price of \$1.25 an acre, after deducting all previous payments, would produce for the Cherokees \$7,113,846, a fund the income from which, at 5 per cent., would give them over \$350,000 a year, to be paid by the United States, whose credit it is not necessary to eulogize.

It would be a great boon to the country if this vast and fertile land could be redeemed from the use now made of it for merely herding cattle by persons to whom illegal leases have been made, and in connection with Oklahoma and the other territory the Indians are willing to cede, could be transformed into a State, where law would prevail and homes might be established; where the fertility of the land would be developed and a thriving American population nurtured.

I regret to say, however, that a corporation, such as we find in numbers throughout our country, established under some State law, with

no individual responsibility resting upon the members of it, and whose assets are chiefly the cattle they have grazing upon these lands, ready for sale and to be removed at any moment, have entered into competition with the United States for the possession of this territory. Since the passage of the act authorizing the creation of the Cherokee Commission this company has come forward and offered the Cherokees a proposition for leasing the land for the next fifteen years; the first five years to yield, it is claimed, a rental per annum of \$200,000, the next five years \$400,000, and the last five years \$720,000. The proposition is peculiar from the enormous price offered; from the fact that grazing cattle upon such lands does not enhance their value, even for grazing purposes, but chiefly because it seems to have been conceived in a spirit of opposition to the Government by a few of its own citizens endeavoring to thwart the national progress and to prejudice the minds of these Indians against a fair consideration of the offer of the United States.

It has been decided by Attorney-General Devens, and also by Attorney-General Garland, that such attempted leases are illegal and void; and upon a review of this whole subject, Assistant Attorney-General Shields, assigned to this Department, has given me his opinion against the validity of such leases.

Previous Secretaries of the Interior have announced to Principal Chief Mayes that any such leases will not be recognized, as they are in violation of that provision of the Revised Statutes prohibiting any person from acquiring any right or title in any of the lands in any Indian territory. The present Secretary has written to the Cherokee Commission at some length his opinion upon this question, and pointed out therein some of the facts here noted with a view to having them presented to the Cherokee Nation. The Cherokee Nation should not be forced in the least degree to submit involuntarily to the terms offered by the United States, but the Government should refrain from so doing only because of the same sense of justice that would control it in dealing with white men, and not from any sentimentality for this particular nation, based upon a supposition of its weakness or ignorance; for the Cherokees are men of intelligence, who understand the rights of both their own nation and those of the United States.

My purpose in bringing your attention to this matter is to advise you of the progress made and to recommend the necessity of Congress making more exact and stringent laws prohibiting the direct interference of citizens of the United States with the movements of the Government when attempting to negotiate with the Indian tribes. It is the practice of some of our citizens, regardless of the national will which is declared by laws enacted by Congress and approved by the President, to go to the Indian tribes without any personal pecuniary interest in the business, and, at the very time when the commissioners are acting, directly interfere and oppose the negotiations.

The intelligence and wisdom of the whole country, expressing itself through the law, are more to be relied on than the judgment of individuals, and the supreme authority ought not thus to be assailed and thwarted.

The treatment of the Indians by the present administration has been sustained in all cases by a strong desire and purpose to alleviate their condition and lead them into the higher plane of civilization. It is not intended that discussion and criticism by any one should be prevented, but active opposition on the field of operations is quite another matter and is in contempt of the authority of the nation.

Such laws are not unknown, as there is already one making it a penal offense to alienate or *to attempt to alienate the confidence of any Indian or Indians* from the Government of the United States. (Revised Statutes United States, Sec. 2113). This should be broadened to cover the acts above specified.

CENSUS OF 1890.

I desire also to call your attention to the creation and progress of the Census Office. This was established by act of Congress of March 1, 1889 (25 U. S. Stats., p. 750), providing that a census of the population, wealth, and industry of the United States shall be taken as of the date of June 1, 1890, and that there shall be established in the Department of the Interior an office to be denominated the "Census Office," the chief officer of which shall be called the Superintendent of Census, whose duty it is, under the direction of the head of the Department, to superintend and direct the taking of the Eleventh Census of the United States, in accordance with the laws relating thereto, and to perform such other duties as may be required of him by law.

Mr. Robert P. Porter was duly appointed Superintendent under this act and has proceeded energetically in the discharge of his duties, to which he brings not only native ability of a high order but a great experience derived from his intimate connection with the taking of the Tenth Census.

Thorough preparation has already been made for this, the Eleventh Census. The country has been divided into one hundred and seventy-five supervisors' districts; the several divisions (in all about twenty separate inquiries) have been started, and elaborate preparations completed for the enumeration of the population.

The Eleventh Census, while comprising all the investigations undertaken in the Tenth, will include two additional and important features: an inquiry in relation to the recorded indebtedness of private corporations and individuals, and a list of the names, organizations, and length of service of surviving soldiers, sailors, and marines, and their widows.

I am assured by the superintendent that the forthcoming census, as compared with any previous one, will be more statistical and less scientific; more adapted to an actual inventory of the nation's progress in

population, industry, and wealth, and less given to technology, descriptions, and scientific disquisitions.

The latest appliances for the rapid tabulation and presentation of the results of the census have been adopted, and no effort will be spared to present, at as early a date as possible, the entire results of another decade of the nation's progress.

As an illustration of the magnitude of this undertaking, it is only necessary to mention the fact that it is estimated that there will be employed in taking the Eleventh Census 42,000 enumerators, 2,000 clerks, from 800 to 900 special agents, 175 supervisors, and 25 experts. The number of published volumes will probably exceed those of the Tenth Census. The calculation has been made that if the inquiry in regard to veterans should yield 1,600,000 names, it will take eight quarto volumes of 1,000 pages each to contain them.

Every effort will be made to secure an early publication of results. To that end the Interior Department has leased buildings capable of providing for two thousand clerks, and the Superintendent, by the aid of specialists, has mapped out in advance the scope of every special inquiry.

A SUGGESTION.

Upon the recommendation of the Superintendent it is suggested that our decennial census would be far more complete and satisfactory if the Census Office were made a permanent Bureau. The work of preparation for a census such as that of the United States is as vast and important as the actual enumeration itself. The demand for exact statistics is constantly increasing, and the importance of greater accuracy and care in securing statistical data of all kinds would seem to indicate that as soon as the volumes of one census are published the preparatory work of another should commence. Under the present system it is impossible to keep the avenues of information open, while the skilled statisticians, experts, and trained clerks become scattered, and there is great danger of repeating mistakes and attempting costly experiments. A permanent census office would be undoubtedly in the interests of economy and of statistical science, and would result not only in more efficient work, but in greater rapidity of publication.

EXAMINATION OF CLERKS.

It is to be remarked that by the last clause of section 3 of said act (25 U. S. Stats., 761) it was enacted: "All examinations for appointment and promotion under this act shall be in the discretion and under the direction of the Secretary of the Interior." By this the appointments were removed from the control of the Civil Service Commission, and in order to secure competent clerks in this office it was deemed sufficient to require them to pass an examination before a board established by the Secretary and upon such subjects as bore near relation to the work

to be performed, and not difficult for those of ordinary intelligence and education. Such a board has been in operation almost from the beginning of work in the office, and the results have been very satisfactory. By it a large force under the demands of particular stages of the work can be obtained near the place of demand; and when this extra force is discharged, as it necessarily must be after a comparatively short use of from six months to a year, the individuals will find their homes, and not be in the distress or danger that would await such a body drawn from all parts of our wide country under the more general regulations of the Civil Service Commission.

It is desirable that this census should make a special enumeration of the Indians of the United States both on and off the reservations, and the Commissioner of Indian Affairs will co-operate to this end by giving the assistance of the officers and employés of his Bureau.

The Superintendent's extended report will be published.

BUREAU REPORTS.

Next in order it will be proper to discuss the different bureaus and other institutions within the boundaries of this far-extending Department. The Interior Department embraces the bureaus denominated the General Land Office, which has within its jurisdiction all the public lands of the United States; the Patent Office; the Pension Bureau; the Bureau of Indian Affairs; the Bureau of Education; the Bureau of Railroads; the Census; the Geological Survey; the Utah Commission; the Architect of the Capitol; the Hot Springs Reservation in Arkansas; and the Yellowstone National Park. It, moreover, has to take supervision of the institutions for the Education of the Deaf and Dumb; the Asylum for the Insane; the Freedman's Hospital; Washington Hospital for Foundlings, and to provide for the education of the blind and feeble-minded children of teachable age in the District of Columbia. All the Territories also come under the Secretary's supervision, and look to him for guidance in matters of dispute or difficulty, including Oklahoma, which is yet, as above described, between a mere domain and an organized Territory. He is also required by law to preside over the meetings and attend to the business of the Zoological Park and pass upon the form of reports of the "Maritime Canal Company of Nicaragua" (25 Stats., U. S., 673).

There can be but little question that the General Land Office of all these is that one which demands the most careful and faithful management with the most legal knowledge. They demand, and I believe the questions relating to all the different titles to lands have received, during the present administration the benefit of the highest learning and careful analysis from the First Assistant Secretary (Chandler), and Assistant Attorney-General for this Department (Shields) as well as from the Commissioner and Assistant Commissioner. These questions all arise and must be settled before the title passes from the United States, and

by this peculiar difference separate lands as dealt with in the Land Office widely from the lands subject to cultivation, that invite the care and receive the benefits of the Department of Agriculture.

There are needed in the Assistant Attorney-General's office a stenographer for his individual assistance; and each law clerk at the head of a room (3) should have a salary of \$2,500.

It will be difficult within the limits of an ordinary volume to comment upon the different questions to be presented in relation to these varied subjects with anything like accuracy and clearness, but having been assisted by the heads of these different bureaus and institutions, I beg to call attention to some of the more salient features that present themselves in connection therewith, depending largely in my statements upon the exhaustive reports that are published herewith

GENERAL LAND OFFICE.

PUBLIC LANDS.

The then acting Commissioner of the General Land Office in his report for the fiscal year ending June 30, 1889, covers an administration of eleven months under his predecessor and one under himself, and presents many valuable facts and suggestions, which exhibit a great improvement in results of labor there, most favorable to the people.

During the four years of the prior administration there had accumulated 105,000 cases over and above any former amount. As soon as the present Secretary entered upon his office and learned this condition of affairs he ordered an investigation of the cause of this bad state of the public business, and that such changes should be made as would expedite the final disposition of cases pending for examination. The cause was not far to seek. The then Commissioner, (Sparks,) had made a most remarkable order on April 3, 1885, to be found in full in the Report of the Commissioner of the General Land Office. By this order, final action upon all entries of the public lands, except private cash entries and such scrip locations as *are not dependent upon acts of settlement and cultivation*, was *suspended* in the following localities, viz:

All west of the first guide meridian west, in Kansas; all west of range 17 west, in Nebraska; the whole of Colorado, except lands in the late Ute Reservation; *all of* Dakota, Idaho, Utah, Washington Territory, New Mexico, Montana, Wyoming, and Nevada, and that portion of Minnesota north of the indemnity limits of St. Paul, Minneapolis, and Manitoba Railroad; and, in addition, final action was suspended upon *all* timber entries under act of June 3, 1878; also upon all cases of desert-land entries.

In view of the conditions of this order, it will be perceived that it was aimed at and affected only citizens of the United States who were endeavoring to obtain lands by acts of settlement and cultivation, and was substantially an indictment of all of them, without regard to individuals, who were seeking to obtain homes in the whole vast territory

mentioned. The source of such an order can be traced only to an utter disregard of the private reputation for integrity of those citizens who had settled in this vast western domain. The Commissioner was supported in this broad accusation by others within the General Land Office; and had not the wisdom of a less suspicious nature intervened, this course of action might have brought upon the country, not only the greatest disgrace, but possibly internal commotions of serious magnitude. It led immediately to a vast accumulation of unadjusted claims and to a general discouragement of settlement upon the public domain.

The Commissioner was reluctant to recede from his order, but on December 3, 1885, by force of public opinion, he was compelled to modify it to the extent that—

The Commissioner would certify to and request the issue of patents upon all entries not subject to reasonable doubt, viz:

- (1) In contests where the rights of successful parties have *been established*.
- (2) Where examinations have been made by Government agents and *no fraud appears*.
- (3) Homestead entries where evidence of residence, improvements, and cultivation *have been established according to law*.

And a board, to consist of the Assistant Commissioner, chief clerk, and chief law clerk, was organized to pass upon and report *said* cases to the Commissioner.

This order was arbitrary and illegal upon its face. There was no necessity for any board, other than that which had been for a long time established in the office, to review such cases as these, that were already examined and found just.

The condition in the General Land Office became so grave by these obstructive measures that Secretary Lamar on April 6, 1888, wrote to Mr. Sparks, Commissioner, that—

Whatever necessity may have existed at the time of its promulgation had ceased to be sufficient to longer continue an order suspending all action and *involving in a common condemnation the innocent and guilty, the honest and dishonest*. While I earnestly urge the exercise of the strictest vigilance to prevent, by all the agencies in your power, the consummation of fraudulent or wrongful land claims, yet, when the vigilance of all the agencies shows no substantial evidence of fraud or wrong, *honest claims should not be delayed or their consideration refused on general report or rumors*.

The above order (that of April 3), as issued by you, is therefore revoked, and you will proceed in the regular, orderly, and lawful consideration of the claims suspended by it.

The Commissioner of the General Land Office was determined, however, not to allow the patents to go to the people upon the decision thereof by the usual and ordinary means, but sought to further restrain their delivery, and initiated, November 29, 1886, a most unnecessary division in the Land Office, called Division "O."

This division was in effect merely one of re-review. For many years previous to its creation the business of the Land Office had proceeded with great justice and efficiency without it. It was a mere substitu-

tion, in point of fact, for the special board created by the previous order, and based upon the same general suspicion that whoever sought to obtain Government land was *prima facie* intending to perpetrate a fraud; the same feeling that originated the original order suspending final decision on claims of the inhabitants throughout many States and most of the Territories. Its effect was to accumulate more and more undecided cases, upon which the investigation before practiced would have been entirely sufficient, and would have given the land to the settler who was entitled to it. It was in contravention of the liberal spirit of the Government, and the substitution therefor of unreasonable official suspicion. Before cases could reach Division "O" they were passed upon *favorably* and by persons fully capable of securing the Government against fraud. Those passed on unfavorably to the applicant never reached this division. The previous system was sufficient to determine every case upon its real merits according to law, the good faith of the settler being presumed unless evidence appeared to the contrary. The system inaugurated was the reverse of this; it took away all presumption of good faith and was meant to harass and obstruct the settler.

At the time it was determined to dispense with this unnecessary division in the General Land Office there had accumulated in it nearly 18,000 cases. They were, however, soon disposed of upon careful but liberal examinations, and upon approval of the Secretary, on July 6, 1889, Division "O" was discontinued, and the work thereof was ordered to be performed in the division to which such work primarily belonged.

By the report of the Acting Commissioner the most beneficial results are shown to have followed.

He says:

The annual reports made by former Commissioners show the total number of patents issued for agricultural lands during the years named, as follows:

Fiscal year ending June 30, 1886.....	19, 885
Fiscal year ending June 30, 1887.....	24, 558
Fiscal year ending June 30, 1888.....	47, 180

Total for three years.....	91, 623
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Averaging 30,541 per year, or an average of 2,545 per month.

The total number of agricultural patents issued for the fiscal year ending June 30, 1889, is 70,141. During the first eleven months of that year, under the former methods of work, there were issued of said total 53,618 patents, being a monthly average of 4,874, while during the month of June of said year, under the new methods, there were issued 16,523 patents; a most gratifying increase over the former management. To still further illustrate the successful workings of the office under present management it may be proper to state that notwithstanding the reduction of clerical force during the months of July and August of the present year, by leaves of absence to which the clerks are entitled, sickness, and other causes usually occurring and unavoidable in these months of the year, agricultural patents were issued as follows: July, 7,423; August, 9,480. Adding to these the issue of June last, as above given, 16,523, we have the total for three months of 33,426, or an average of 11,142 per month.

The act of the Land Office in sending out these land patents has not only been one of justice, but it has been responded to by a greatly in-

creased confidence on the part of the people in the sympathy of the Government for them in their pioneer lives and in its disposition to protect them in their homes and property.

It is not to be understood from the expressions herein made that there is any disposition to relax the examination of claims to land to an extent that will permit fraud to grow or illegal claims to be established. On the contrary, greater vigilance has been exacted in these particulars; but that vigilance is directed to the examination of records and evidence in each individual claim, and is not exhibited in wholesale suspicion and general suspensions. A great many claims deemed illegal are now under investigation, and many causes now pending for fraudulent infractions of the laws will be prosecuted. The most notorious of such fraudulent claims are traced to corporations seeking to obtain the public domain for corporate purposes through pretended settlements of individuals. These matters are undergoing a strict investigation and will be decided as the law requires, without regard to the results that may fall upon those who think that because they invest great sums of money in some particular enterprise which at its beginning is illegal, they should be protected later on because of the ruin that would follow from a decision against them. This must be their own concern. The purpose of the Government is to bestow the lands for homesteads according to law and not according to individual or corporate desires.

Business of the General Land Office for 1889.

PATENTS ISSUED.

	Acres.
Agricultural patents, 70,141, covering.....	11,791,110.07
Mineral patents, 913.....	
Coal patents, 155, covering	17,096.80
Railroad lands, covering	425,046.02
Swamp lands, covering	259,721.45
State selections under educational grants, covering	132,350.61
Indian and miscellaneous patents.....	159,390.21
Total.....	12,784,715.16

There can be found in the Commissioner's report tables assigning these different selections to the proper States and Territories in which they are situated.

The final entries made during the year covered 9,088,592.15 acres; the original entries, 8,989,109.44 acres, and the railroad and other selections, 4,514,570.10 acres. The total amount of cash sales amounted to \$8,379,410.40. The number of final entries disposed of during the year reached 80,000.

There remained pending in the office on the 30th of June, 1889, 180,618 final entries of all classes; of original entries of all classes then pending 353,984. Railroad selections undisposed of, 29,444,251.64 acres (an increase over the amount pending at the beginning of the

year of 4,014,385.53 acres). This does not include 304,926.67 acres of Oregon wagon-road selections. Swamp selections of the various States covering over 2,000,000 acres were pending, and educational and internal-improvement selections covering 1,978,472.88 acres.

The cash receipts for the year, from all sources, were \$9,685,901.34, a decrease as compared with the previous year of \$3,861,236.08. This decrease the Commissioner explains, was due mainly to the falling off in cash entries.

IRRIGATION.

The subject next in importance in the Land Office, I deem that of the system already inaugurated by Congress for the redemption of the arid regions by irrigation. The acts of Congress on which it is based are recent and are as follows:

On March 30, 1888, a joint resolution was approved, directing the Secretary of the Interior, by means of the Director of the Geological Survey, to investigate the practicability of constructing reservoirs for the storage of water in the arid regions of the United States and to report to Congress. Afterwards, upon such report, Congress inserted in the act approved October 2, 1888, making appropriation for the sundry civil expenses of the Government for the fiscal year ending June 30, 1889, the following:

For the purpose of investigating the extent to which the arid region of the United States can be redeemed by irrigation, and the segregation of the irrigable lands in such arid region, and for the selection of sites for reservoirs and other hydraulic work necessary for the storage and utilization of water for irrigation and the prevention of floods and overflows, and to make the necessary maps, including the pay of employés in field and in office, the cost of all instruments, apparatus, and materials, and all other necessary expenses connected therewith, the work to be performed by the Geological Survey, under the direction of the Secretary of the Interior, the sum of \$100,000, or so much thereof as may be necessary. And the Director of the Geological Survey, under the supervision of the Secretary of the Interior shall make a report to Congress on the first Monday in December of each year, showing in detail how the said money has been expended, the amount used for actual survey and engineer work in the field in locating sites for reservoirs, and an itemized account of the expenditures under this appropriation. And all the lands which may hereafter be designated or selected by such United States surveys for sites for reservoirs, ditches, or canals for irrigation purposes, and all the lands made susceptible of irrigation by such reservoirs, ditches, or canals are from this time henceforth hereby reserved from sale as the property of the United States, and shall not be subject after the passage of this act to entry, settlement, or occupation until further provided by law: *Provided*, That the President may at any time in his discretion, by proclamation, upon any portion or all of the lands reserved by this provision to settlement under the homestead laws.

The act approved March 2, 1889, making appropriation for the sundry civil expenses of the Government for the fiscal year ending June 30, 1890, makes an appropriation of \$250,000 for the same purpose.

In conformity with the provisions of the above acts, the Director of the Geological Survey has notified the Secretary of the Interior of the selection of sites for reservoir purposes, situated in the following States

and Territories: California, Colorado, Utah, Idaho, Montana, and New Mexico. These selections have been approved by the Department. In the circular issued by the acting commissioner, in compliance with the instructions of the Secretary dated August 5, 1889, it was stated to the registers and receivers of the land offices that information had reached this Department that parties were endeavoring to make filings on arid lands reserved for reservoirs, irrigating ditches, and canals, and for the purpose of controlling the waters of lakes and rivers and their tributaries in the arid regions, and the attention of these officers was called to the act of October 2, 1888.

In this circular was pointed out the object of the act, as follows:

The water sources and the arid lands that may be irrigated by the system of national irrigation are now reserved, to be hereafter, when redeemed to agriculture, transferred to the people of the Territories in which they are situated, for homesteads.

The act of Congress and common justice require that they should be faithfully preserved for these declared purposes; and it was in the circular distinctly stated:

Neither individuals nor corporations have a right to make filings upon any lands thus reserved, nor can they be permitted to obtain control of the lakes and streams that are susceptible of use for irrigating purposes.

You will therefore immediately cancel all filings made since October 2, 1888, on such sites for reservoirs, ditches, or canals for irrigating purposes, and all lands that may be susceptible of irrigation by such reservoirs, ditches, or canals, whether made by individuals or corporations, and you will hereafter receive no filings upon any such lands.

The surveyor-general for Idaho, referring to the operations that had been entered upon for procuring data on the subject of the projected plan of irrigation in that Territory with Government aid, says that enough has already been reported to warrant the belief that more than 6,000,000 acres can easily be reclaimed from dry, arid plains, and made to produce from \$30 to \$50 worth of hay, grain, and vegetables per acre. Without this comprehensive system of canals and storage reservoirs to bring the abundant waters upon this wide extent of arid plains, Idaho has now nearly reached its limit in agricultural prosperity. The surveyor-general also remarks upon the likelihood of speculators endeavoring to secure water rights necessary for the success of the project when it is found that the Government is likely to inaugurate the work of irrigation. He expresses the opinion that the immediate enhancement of the value of lands now a desert waste would be so great as to far more than refund the cost of irrigation, and that the work is of such a character as should be undertaken either by the Federal Government or by the Territory or State, in order that the greatest good might result to the greatest number.

The surveyor-general for Nevada remarks that the State has a wide range as to crops, but its productive qualities, as to quantity, are limited by reason of the great lack of water. Impounding water for the purposes of the agriculturist has been but little practiced within the

State. He refers, however, to some notable examples in which water stored by dams in the mountain gorges has been brought many miles in ditches constructed for the purpose, and by its vivifying influence large tracts of land, several sections in extent, have been brought under cultivation, yielding crops to the value of not less than \$40 per acre, where, before the improvements were made, nothing but sage-brush grew. The surveyor-general describes at some length the arid regions of the State, and enforces his views as to the beneficial results which will ensue from the storage of water in the several localities named, and also refers to the natural reservoirs or lakes, and other facilities, which can be utilized under the provisions of the act approved October 2, 1888.

The expression of like interest is to be found in the reports from all the Territories containing arid lands; and there is certainly no subject that should be more earnestly considered than this cause in which the National Government has already invested so much money and to which it has demanded so much attention by its officers.

An important feature of the control in the arid regions over the water-supply was illustrated by a recent event which threatened serious difficulty between the people of Utah and Idaho Territories.

Bear River has its source in Utah and runs northward into Idaho, where it forms Bear Lake, and making a long circuit runs south and enters again the Territory of Utah. While the Idaho Constitutional Convention was in session it was stated by that body that certain parties were endeavoring in Idaho to divert the waters of the river from its channel for use in Utah. The Secretary, upon the application made to him for relief, called attention to the law of October 2, 1888, and this seemed to satisfy the demands of the case.

But it is apparent that in those States and Territories where irrigation must be resorted to and where the same stream runs through different States or different Territories, unless some control is kept by the National Government, the streams may be exhausted or greatly depleted by those nearest its source, and that those below, who have already made every preparation and calculation dependent on the particular water supply, may be brought to great loss, if not destitution. Illustrations readily present themselves in many different parts of the arid region and the importance of the result is easily seen. Important as the subject is and involving the welfare of whole communities, it is felt unnecessary to do more than call attention to it to have it fully understood.

It was not until this threatened trouble between Idaho and Utah that the law of October 2, 1888, was, by the reply of the Secretary, brought fully before the country. Immediately many communications were received expressing alarm at the fact that title could not be acquired in so vast a region as was reserved by the act, and no doubt millions of dollars have already been invested both in improvements on lands of this description and ditches for their irrigation.

The present statute should be supplemented by some general law, with such other provisions as will meet the different difficulties apt to arise from any national system of irrigation intended.

The general subject of irrigation will no doubt be fully discussed by the Director of the Geological Survey in his special report required by law to be presented by him to Congress. But I deem it my duty to recommend that the attention of Congress be invited to the necessity of determining at the present session whether it will establish permanently the reservation of all the irrigable arid region; and, if so, what general laws it may deem best adapted to regulate the supply and use of water under Government control. Action, it is recommended, should be taken without delay; and the system, if prosecuted by the National Government, should be based on comprehensive, liberal, and practical provisions.

PRIVATE LAND CLAIMS.

Under different acts of Congress, supplemented by Departmental instructions, the proper officers have investigated and reported upon numerous private land claims embracing millions of acres, and these reports have been laid before Congress, which alone, under existing statutes, can confirm or reject them. The titles to some have been determined to be valid, but many are still pending for want of action by the legislative body. Where preliminary surveys have operated, in connection with the official instructions of law, tracts have been reserved from entry or improvement by actual settlers under the public and system, and the land has been left to the enjoyment of the claimants.

ARIZONA AND NEW MEXICO.

It has been the received opinion until a recent decision of the Commissioner, that no matter whether the report of the surveyor-general was for or against the claim, upon the Commissioner reporting it to Congress, all the lands embraced in the claim, as made, were reserved from the public domain and consequently from settlement by our citizens.

However, in an opinion upon the *Tumacacori and Calabazas claim*, promulgated March 6, 1889, the former Commissioner of the General Land Office has discussed the duties and powers of the Commissioner under said acts with learning and ability, maintaining that the lands are not necessarily reserved in all cases of such reports: He states that—

The eighth section of the act of 1854 directed "the surveyor-general of New Mexico to ascertain, under the instructions of the Secretary of the Interior," "the origin, nature, character, and extent of all claims to lands under the laws, usages, and customs of Spain and Mexico," gave him all the powers needed for the purpose, and required him to "make a full report on all such claims as originated before the cession of the territory to the United States by the treaty of Guadalupe Hidalgo of 1848, denoting the various grades of title, with his decision as to the validity or invalidity of each of the same under the laws, usages, and customs of the country before its cession to the United States;" required a similar report in regard to pueblos, directed that these reports "be according to the form which may be prescribed by the Sec-

retary of the Interior," and provided that such reports should "be laid before Congress for such action thereon as may be deemed just and proper, with a view to confirm bona fide grants and give full effect to the treaty of eighteen hundred and forty-eight;" and further provided that "*until the final action of Congress on such claims all lands covered thereby shall be reserved from sale or other disposal by the Government, and shall not be subject to the donations granted by the previous provisions of this act.*"

He then continues:

For many years it appears to have been customary for this office to *regard as reserved all lands embraced in preliminary surveys* of alleged private land claims, although made at the instance of claimants or their assignees after the submission of the report of the surveyor-general, and irrespective of the character of the claims or their legitimate extent under the laws of Spain and Mexico. *In this manner immense quantities of public land in New Mexico and Arizona have been withheld from public occupation for periods going back from ten to thirty years.*

In his last annual report the surveyor-general of New Mexico, referring generally to this fact, and the public inquiry resulting from the practice of regarding such lands as reserved, mentions three cases as illustrative of the wrong pointed out; and he continues:

Why should not the General Land Office revoke this reservation and restrict it to the 500 acres? I could readily multiply these examples, but it is unnecessary. "The point I make is a vital one. *It involves the title to very large areas of land that should be devoted to actual settlement and tillage under the pre-emption and homestead laws.*" (Land Office Report, 1888, p. 475.) * * * The mere transmission of the case to Congress can not operate as a reservation of the land. The "full report" of the surveyor-general must show the claimant's right to it; and if in addition to this he has shown "the precise locality and extent of the tract" the Land Department can and should reserve it, and not otherwise. *In dealing with the land grants of New Mexico this principle has been very generally disregarded by the surveyor-general and the General Land Office and millions of acres of public lands have thus been unwarrantably turned over to monopolists.* (*Ibid.*, pp. 474, 475.)

But Congress takes no action upon the question of reservation. That is an administrative question, pertaining to the duties of the Commissioner to execute the laws relating to public lands and private land claims.

These views present strong arguments for Congressional action, even if they may not be adopted as a proper construction of the statute quoted.

CALIFORNIA.

No patents for private land claims in this State have been issued during the fiscal year, and but few cases remain in which final action has not been taken by the Land Department.

LOUISIANA.

Thirty-four separate claims upon Surveyor-General's scrip, aggregating 25,439.62 acres, have been approved and patented.

LEGISLATION RECOMMENDED.

The necessity of legislation on the subject of private land claims has been called to the attention of Congress by former Secretaries on several occasions. (See Reports, of Secretary Lamar for 1885; p. 38; for 1886, p. 26; for 1887, p. 18; Report of Secretary Vilas for 1888, p. 25 *et seq.*)

These reports, as well as a knowledge of the nature of these claims and information as to their extent, will lead any one to the conclusion that legislation upon the subject is absolutely necessary in order that the treaty obligations of the Government may be carried out and the public domain protected from inroads upon it, that are constantly being attempted by the presentation of fraudulent claims.

In this legislation two prominent features should be observed: First, the importance of terminating this class of claims; and second, of providing a board or commission for their adjudication such as shall insure a full and thorough investigation. These grants are based on very ancient transactions, and the interests of the Government as well as of bona fide claimants require that there shall be some conclusion to their litigation. It is becoming more difficult yearly for bona fide claimants to make such proof as should be required in support of their claims, and also more difficult for the Government to produce evidence showing the fraudulent nature of those which are baseless or exaggerated. Provision should be made to bring parties and witnesses before the tribunal intrusted with the decision of these important questions; for, in *ex parte* proceedings manufactured or grossly exaggerated claims can be easily supported by perjured testimony.

It was suggested by the Secretary of this Department in the report for the year 1888, page XXVII, that under the act of March 3, 1887, entitled "An act to provide for the bringing of suits against the Government of the United States," and a certain decision of one of the lower United States courts, a claimant might compel the United States to make a patent to a piece of land entered at the local land office, and thus the Land Office would be required thereafter to register decrees and issue patents accordingly. The Supreme Court of the United States, however, has recently decided otherwise. In *United States v. Montgomery* (131 U. S. S. C. Rep., p. 1) it is held that the act of 1887 above described does not confer upon the district or circuit courts of the United States, or upon the Court of Claims, jurisdiction in equity to compel the issue and delivery of a patent for public land.

This leaves the question where it was before, and it is apparent that the interest of the people in great districts of our country demands action by Congress on the subject of their private land claims. The present condition works constant private injury and is a national discredit.

RAILROAD LAND GRANTS.

In his report the Acting Commissioner calls attention to a want of clerical force to carry into due effect the provisions of the act of March 3, 1887. By this act the Secretary of the Interior is authorized to adjust immediately in accordance with the decision of the Supreme Court, each of the railroad grants made by Congress, and if it should appear that any of these lands have been erroneously certified or patented by the United States to these companies, it is made the duty of the Secretary

to demand a reconveyance of such lands to the United States. The act further provides that if the company shall fail to reconvey the lands within ninety days, it shall be the duty of the Attorney-General to take the necessary proceedings to cancel all such patents. The act also provides for the re-instatement of the homestead and pre-emption of any *bona fide* settler erroneously canceled on account of any railroad grant or the withdrawal of public lands from market. The Commissioner reports that 21,660,846.88 acres of railroad grants have been suspended in pursuance of the policy of the office to await legislation for forfeiture.

Upon the adjournment of Congress without passing any of the bills touching these suspended selections, the question arose whether the Commissioner should proceed to adjust the claims of the companies. Under date of March 25, 1889, the Secretary directed that it should be continued until further orders, and this has been substantially followed, although there have been some decisions made in contested cases with settlers to the effect that where the road had been built and no forfeiture yet declared by Congress, upon selections by the railroad, it was entitled to the lands in place, upon the principle announced by the Supreme Court of the United States in the case of *Schulenberg v. Harri-*man (21 Wallace, p. 44), to the effect that—

Where the grants are '*in presenti*,' they passed the title of the railroad to the odd sections designated to be afterwards located; when the route was fixed their location became certain, and the title, which was previously imperfect, acquired precision and became attached to the land; that the lands granted have not reverted to the United States, although the road was not constructed within the period prescribed, no action having been taken either by legislative or judicial proceedings to enforce a forfeiture of the grants, and that the provisions in the act of 1856 that all lands remaining unsold after a certain number of years shall revert to the United States if the road be not completed, is a condition subsequent, being in effect a provision that the grant, to the extent of the lands unsold, shall be void if the work designated be not done within that period; but that no one can take advantage of the non-performance of a condition subsequent annexed to an estate in fee but the grantor or his heirs or successors; and if *they* do not see fit to assert their right to enforce a forfeiture on that ground, the title remains unimpaired in the grantee; that this rule equally obtains where the grant upon condition proceeds from the Government, and that either judicial proceedings authorized by law must be instituted to enforce a forfeiture, or there must be some legislative assertion of ownership of the property for breach of the condition, such as an act directing the possession and appropriation of the property, or that it be offered for sale or settlement.

In deciding cases where this question arises as between the railroad and the settler, effect is to be given to this decision of the court of last resort. But where the railroad company is claiming the land by virtue of the grant, it imposes a great burden upon the Commissioner of the Land Office and the Secretary of the Interior to have to determine whether the patents shall be issued or not.

If Congress intends to forfeit the lands, all of the facts are before it. The failure to act may well be taken as an indication on the part of the Government that the forfeiture will not be insisted upon. Such would be a just conclusion on the part of the officers of this Department, and

these patents may yet be issued upon the presumption that Congress does not intend that the forfeiture shall be exacted and that there is no need of further delay. There should certainly be found somewhere the moral courage to give the evidence of title to the railroads as it is given to the individual, if it is intended that any possible forfeiture will not be insisted upon. The obligation, however, fairly rests upon Congress, and it is hoped that the latter will assume it and act without further delay. Not only the railroad companies are interested in the decision of these matters, but also the Government, in order that its business may be disposed of; the citizens, who have purchased from the company relying upon the grant, and the settlers, who, in anticipation of the restoration of these lands to the public domain, have settled upon them under the homestead or other laws.

I approve the recommendation of the Commissioner that the Fifty-first Congress should give some expression of legislative opinion, by joint resolution or otherwise, as to whether or not action should be taken in the Land Office on selections now pending. As to such portions of land grants as are coterminous with those portions of roads still uncompleted, it is estimated that 5,000,000 acres might be restored to the public domain by the immediate declaration of such forfeiture.

MICHIGAN GRANTS FORFEITED.

Pursuant to the act of Congress of March 2, 1889, entitled "An act to forfeit lands granted to the State of Michigan to aid in the construction of a railroad from Marquette to Ontonagon, in said State," instructions were issued to the local land officers, under date of March 13, by which they were directed to give notice, in the usual form, that the lands forfeited had been restored to the public domain, and that they were held for entry at \$1.25 per acre, under the pre-emption, homestead, and other laws relating to unoffered lands; and also giving them detailed instructions as to any existing claims of settlers upon the lands. In all cases where there were *bona fide* settlers on these lands at date of forfeiture they were given the preference right of entering the tracts on which they had settled, not exceeding 160 acres each.

Under the order referred to an exception was made as to 20 miles of the Ontonagon and Brulé River road, which is claimed to have been completed prior to February 24, 1882.

It having been charged that this road was never constructed, a reliable clerk of the Land Office was detailed to proceed to Michigan and make an actual examination of said 20 miles of road. Upon his report, dated July 20, 1889, the Secretary directed the Acting Commissioner to "call upon the company to show cause within sixty days why the grant opposite to and coterminous with the last 8 miles of said section should not be declared forfeited and the land restored to entry under the act of March 2, 1889." Due notice was mailed to the secretary of the said

company, and its receipt was acknowledged under date of August 22, 1889. This matter is yet pending.

WAGON-ROAD GRANTS.

By various acts of Congress from 1864 to 1874, a list whereof accompanies the Commissioner's report, land grants were made to the State of Oregon to aid in the construction of certain military and wagon roads, and these lands were conveyed to different companies by the State, after the certification by its governors that the roads in question had been constructed. Upon the report of the Commissioner to the Department on May 10, 1887, two commissioners were appointed and directed to proceed to Oregon for investigation of the question whether such roads had been completed. Upon a report dated February 18, 1888, the Secretary found that these roads had never been built nor the lands earned; and on March 13, 1888, he submitted the matter to the President, and recommended that proper steps should be taken for the recovery of the land.

Pursuant to this recommendation the act of March 2, 1889, was passed, which makes it the duty of the Attorney-General, within six months after said date, to cause suit to be brought to reclaim the land so donated; and the act further authorized the court to declare a forfeiture of such lands as were conterminous with the parts of the road which were not properly constructed and to set aside the patents that might have been issued for any such lands, preserving the rights of all *bona fide* purchasers.

The Attorney-General has been furnished with all of the data for the purpose of instituting the necessary suits in this matter and is no doubt proceeding therewith. The matter has passed beyond the jurisdiction of this Department.

SWAMP-LAND GRANTS.

Eighty million acres of land have been claimed by different States under the swamp-land grants. The lands so claimed are, for a great part, not swamp lands in point of fact; and all of those claimed since 1850 are not located in any States admitted into the Union since that date, except Minnesota and Oregon. The claims are yet unadjusted, and within the last year 2,010,072.03 acres were filed in the Land Office. The selections of the State of Florida in the past year cover 1,962,080 acres. The entire area of Florida is 37,931,520 acres, while the list of swamp lands claimed altogether amount to 22,221,469 acres, of which 16,061,129.98 have been patented. Only 711.59 were patented to Florida the last year.

The Commissioner calls attention to the fact that none of these lists extend to the extreme southern portion of the peninsula in the vicinity of the Everglades, where the lands are, in fact, swamp lands, and even with that portion of the State left out the proportion of swamp lands

already selected amounts to nearly two-thirds of the entire area of the State.

Similar illegalities have been developed in Minnesota, and investigation is now being made in that State.

The State of Florida denies that it has received or claimed any more than its lawful lands, and the question deserves further consideration.

MINERAL LANDS.

IN RAILROAD GRANTS.

It is reported that the work of examining *ex parte* mineral entries is in arrears about two and a half years, and in contest cases about two months.

There have been suspended in the office, lists of railroad selections involving some 5,561,207 acres, upon the question whether the company shall be required to furnish any mineral affidavits or not.

The question presents itself in regard to the mineral lands lying within the grant of the railroads running through mineral belts, and which would otherwise than because of their mineral character be included within the railroad grants. The act of Congress absolutely and unqualifiedly reserves all mineral lands from the railroad grants made to the most extended and important railroads of our country, and this reservation affects the claim of such a road as the Northern Pacific to a great part of its land subsidy. It also affects to a very considerable degree the Central Pacific and Southern Pacific roads, with some others; and how to determine what are mineral lands at this time when the roads are claiming their grants is indeed a difficult and most important matter. Originally it was left to the company to make affidavit in a form adopted by my predecessors and by them deemed sufficient for a long while, but by which it was not made necessary for the officer taking the oath to swear to his actual knowledge that the land was not mineral.

Many of the selections made by the railroads under their grants were supported by such affidavit, but upon the same coming before the Commissioner of the General Land Office he demanded that a further affidavit should be made, the same as required from settlers on homestead claims, whereby actual knowledge of the fact that the same was not mineral land was required to be sworn to. This the railroad companies have failed to do, insisting that their claims, made under the regulations at the time existing, are valid and should be allowed. This question is not yet determined, but it is deemed a matter to which your attention should be invited for the purpose of having, if necessary, some further legislation upon the subject. On the one hand, it is to be noted that the additional affidavit has been required since the selections were claimed; on the other, stands the absolute reservation of the law and the right of the people to enjoy these mineral lands, if such indeed there be among the selections made by the railroads.

If legislation is not made on this subject the Department will have to decide by such light as may be obtained as to the real nature of the

lands, whether mineral or not, however difficult the inquiry may be and whatever the responsibility assumed. It is deemed, however, that a law should be passed by Congress enabling the Land Department to thoroughly investigate the character of lands supposed to be mineral and within the reservation of the law before the railroad is entitled to any cession whatever. It would require a considerable appropriation for the purpose of investigation and survey; and, connected with this, authority should be given to the Secretary of the Interior to refuse to certify lands to the railroads until there was clear proof that the same were not mineral. The question is most important. It is far-reaching in its results and may affect the welfare and independence of many of our citizens. It would not be unreasonable to direct that the patents issued should themselves contain a reservation of any land therein described if it proved upon further development to be actually mineral land.

The mineral land should be preserved for our people, and there is no claim on the part of the railroads to obtain these sources of vast wealth not intended for them that should be humored to the least degree beyond the law. This I say in no spirit of hostility to the railroad companies, but from a thorough conviction that the best interests of the Republic would be served by dividing this vast mineral wealth among individuals, rather than by allowing it by any means to fall into possession and control of large corporations. It is not intended to be granted to them, and they should not be allowed to obtain it by default. Sufficient means of proving exactly what the character of the land is should be provided.

There are in this division also some 2,129 suspended entries. It is desirable that a re-examination of these cases should be had, as it is believed it would lead to the granting of patents in many cases. It is intended that additional proof shall be called for and the entries either canceled for failure of the claimants to meet such requirement, or, if the proofs authorize it, the patents issued.

Protests are greatly increasing made by parties claiming to have discovered valuable mineral deposits upon land entered as agricultural.

MINING CLAIMS.

There are several thousand old mining applications, some dating back many years, for which no entries have been made.

I approve the recommendation of the Commissioner, which is a repetition of the same contained in former reports, that the delinquent applicants shall be compelled to complete their proofs and pay for their claims within a specified time or submit to forfeiture and cancellation.

The decision of the Land Office is that where the entry has been made in good faith for land as agricultural land, the claim will not be defeated, although there may be mineral thereafter discovered upon the same; but it would be well to have a law passed making the certificate of entry a bar to any mining claim based upon a discovery made subsequent to the entry.

UNITED STATES MAPS AND PLATS.

The general map of the United States was revised during the year, and an edition of 3,825 copies published. Other maps of States and Territories containing public lands have been compiled, and a large number of railroad maps have been prepared, examined, and reported upon.

The Commissioner calls attention to the need of reproducing the plats of surveys now in the office. At the rate of present appropriation—\$2,500 for the current fiscal year—it will require upwards of thirty-nine years to photolithograph the 23,258 plats now needing reproduction. He recommends an appropriation of \$20,000 a year until all the original plats have been copied. The necessity for the reproduction of these plats is very urgent, the originals being in danger of complete destruction by use and the ravages of time. No copies of them are in existence save at the local land offices.

SURVEYS.

During the fiscal year 4,544,372.33 acres have been surveyed and the surveys accepted by the office, after careful examination and inspection. The Acting Commissioner gives details as to the proportion of expenditure in the several public-land States and Territories, and quotes from the reports of some of the surveyors-general. He calls special attention to the matter of allowances made to deputy surveyors by the First Comptroller of the Treasury in the years 1886 and 1887, which in his opinion were grossly irregular and a palpable usurpation of the powers and duties specially belonging to the General Land Office. These allowances relate to certain contracts in California under the "deposit system," the operations of which the Acting Commissioner explains at length, and quotes the sections of the Revised Statutes authorizing them. He says:

It is the understanding of this office that, under the law, deposits made for a specific survey can not be applied to or used for any other or different work, but must be strictly confined to the objects specified by the terms of the deposit. This requires that a separate account be opened and kept with each deposit made; but these restrictions and limitations, however, I regret to find, have been exceeded and frequently disregarded by a former First Comptroller. * * *

My purpose in calling attention to these matters is that Congress may be induced to enact some law clearly defining the jurisdiction and power of the Commissioner of the General Land Office over accounts arising within the scope of his official action and responsibility, and whether accounts passed upon by him shall be final, subject to the right of appeal to the Secretary of the Interior, or whether his action may be disregarded by the First Comptroller, and allowances or disallowances made without reference to facts shown by the records and papers in this office. It would be well if this unseemly conflict of authority could be avoided and these illegal payments hereafter prevented.

I also recommend that an investigation be directed in these cases, to the end that the money, or some portion thereof, paid out in this illegal manner may be recovered to the Government.

THE DEPOSIT SYSTEM.

Out of the deposit system for surveys (by which is meant those surveys that are made by money, supplied by persons desiring such surveys, deposited and treated as an appropriation made by the Government) have grown some of the greatest frauds known in the Land Department. These frauds already perpetrated will be prosecuted with vigor. In California, those particularly known as the "Benson cases" are receiving attention, and it is hoped that all the cases kept so long pending will be brought to an early and legitimate termination.

I am not inclined to recommend a change of the law authorizing such deposits, but I think the regulations of the Department should be kept very strict in relation thereto, until at least the prosecutions now being made and others to be instituted can relieve the constant watchfulness now demanded.

FRAUDULENT ENTRIES.

There have been fewer new cases of fraudulent entries reported during the past year than heretofore. Attention has been called by my predecessor, and is now renewed, to the need of legislation giving registers and receivers authority to issue subpoenas compelling witnesses to appear before them to testify in land cases, or before commissioners appointed by them. At present the special agents have the greatest difficulty in procuring the attendance of desired witnesses, which the Acting Commissioner of the Land Office attributes in his report to three causes: (1) intimidation by parties in interest; (2) unwillingness of witnesses to testify openly against their neighbors; and (3) indifference of witnesses who think that they have done enough when they have given the agent the information on which to base his report.

SPECULATION IN COAL LANDS.

The acting commissioner states that special agents report that efforts have been made by certain wealthy individuals and corporations to fraudulently acquire title to large tracts of coal lands, and says that extensive bodies of these lands, which will eventually be of great value, are being illegally appropriated, the guards and restrictions of the law as it now stands being entirely insufficient to prevent such monopoly by unscrupulous speculators. He says:

The rapid destruction of the forests and the scarcity of wood will leave the settlers in the arid regions of the West without fuel unless the Government coal lands are preserved and disposed of or controlled in such a manner as to secure to them coal at reasonable rates. This is indispensable to the future welfare and prosperity of many of the Western States and Territories, and the power to accomplish such a purpose is being gradually weakened if not entirely destroyed or taken away by allowing the lands to go directly into the hands of railroad and other corporations through names of *nominal entrymen* and without any restrictions as to disposition of the coal.

I would therefore recommend that a thorough geological survey be authorized by Congress, and made under the direction of the Secretary of the Interior, of all pub-

lic lands supposed to contain valuable coal, and that the Secretary be given discretionary powers to reserve from sale all or any portion of said lands; and if he deem it advisable and in the interest of the people residing in the locality of the lands, to lease for a period of years the lands so reserved upon such conditions and restrictions as will compel the lessees to furnish settlers with coal at moderate prices. The law regulating the sale of coal lands should also be amended by making it a felony for any person to enter into a contract or an agreement having for its object the entry of said lands or the appropriation or reservation of the same by means of coal declaratory statements for the use or benefit of a person other than the nominal claimant.

TIMBER DEPREDATIONS AND TIMBER PRESERVATION.

The Department is giving earnest consideration to the vast timber lands of the United States, and the most strenuous efforts have been made to prevent and punish the unlawful appropriations of public timber by individuals and corporations.

There are, unfortunately, conflicting decisions of the courts on this question as to who may appropriate this valuable property; but there can be found, in the report of the Acting Commissioner, a synopsis of the particular laws and decisions as to the timber on public lands which should remove all doubt on this subject.

FOREST FIRES.

Timber depredations, as much as they are to be guarded against, are by no means the most serious danger that threatens the great pine forests that stretch over the vast areas of our public lands. It is fire that is most to be dreaded. The forest fires in the timber regions of Montana, Wyoming, and other Western Territories have destroyed more trees the past summer than have been lost by all the depredations from the beginning of the first settlement until the present date. These timber lands are almost entirely removed from private acquisition in the arid regions, where the greatest volume of public timber land now is. They can not be acquired by any of the methods provided in the homestead, desert-land, or timber-culture laws; they are not agricultural lands; they are not desert lands; and the timber is not for culture, as it already exists.

The arid lands are at a distance below the timber, as these districts are high on the mountain sides, where are garnered beneath and about the lofty pines the ice and snows that, gradually melting as the summer advances, feed the streams and may be made to irrigate the fields. Small portions under the laws may be used for "domestic purposes" and for mines, but the great body can not be acquired by individuals, and is left unprotected from the great fires that sweep those regions.

The value of these forests is manifold, and their preservation and culture is a subject to which the Societies of Foresters are devoting their study and active efforts. They have requested that in this report, as has been done in previous reports of like kind, it should be recom-

mended that Congress appoint a commission to take into consideration the subject of the public timber lands, with a view of ascertaining the best method for their treatment, management, preservation, or of their disposal. This recommendation I earnestly make for the reason that I believe this property has a commercial value as great as any the nation owns; that it is not only threatened but being absolutely destroyed in immense quantities by fire; that its existence, for a large part at least, is essential to the successful prosecution of the irrigation of the arid lands now undertaken by the Government, or that may be prosecuted by the States or Territories. The different methods by which these dangers may be avoided and ends attained need not be discussed here, but will more properly come before the commission or any committee preliminary thereto.

THE PUBLIC LAND STRIP.

The opening of Oklahoma has increased the anxiety of the inhabitants (some 15,000 in number) of the narrow strip of public land just west of Indian Territory, commonly known as "No Man's Land," for some legislation in their behalf. Numerous petitions and memorials have been received on the subject, and I recommend that a sufficient code of laws be provided for the guidance, control, and protection of those residing in this district. Before these lands can be opened to entry they must be surveyed. The cost of such a survey will be at least \$50,000, for which a special appropriation, to be immediately available, should be made.

RECOMMENDATIONS.

The Acting Commissioner closes the body of his report by recommending that Congress be asked to appropriate money sufficient for the employment of fifteen temporary copyists, and explains this by stating that on the 6th of January, 1888, an order was issued by the late Commissioner, directing that the transcription of press-copy books to formal books of record be discontinued, and that there are now 693 books of 500 pages each, constituting the only record of the official acts and decisions of the bureau since the above date. These records, being upon flimsy paper, and not in their nature durable, should be properly copied in bound books of record.

PATENT OFFICE.

The total number of applications received, including designs, re-issues, etc., was 42,047; the number of patents granted was 22,941; the total receipts were \$1,186,557.22; the total expenditures were \$999,697.24, leaving a surplus of \$186,859.98 to be turned into the Treasury of the United States to the credit of the patent fund, and making a total balance in the Treasury on account of the patent fund of \$3,524,526.63.

The Commissioner reports that the examination of applications for

patents carried on in twenty-four of the thirty remaining divisions has been brought up to within two months of that date, and of the remaining six divisions one-half are less than three months in arrears; but he believes that the arrears in work in all the divisions can be practically done away with at an early date through the cordial co-operation of the force with the efforts of the Commissioner.

LEGISLATION.

It is generally conceded that legislation is needed amendatory of the Revised Statutes relating to patents. Some of the provisions which should be altered are section 4885, relating to the date of patents; section 4887, relating to the duration of patents for inventions previously patented in a foreign country; and section 4936, relating to re-imbursement of moneys paid by mistake into the Treasury. The opinion is indeed gaining ground that a revision of the patent act would be of advantage not only to the inventor but to the public generally.

COMPENSATION OF PRINCIPAL EXAMINERS.

The report directs attention to the fact that some of the employés of this Bureau are grossly underpaid. The most conspicuous instance of this character is the compensation of principal examiners. The Revised Statutes fix the salaries of these officers at \$2,500 per annum. This sum was established by Congress in the year 1848 (9 Statutes at Large, 231). It has never been increased. On the contrary, the amount appropriated for a number of years has been \$2,400.

The Commissioner expresses the necessity of additional room, and says, in order that the work of the office may be promptly dispatched, it is indispensable that more room and better facilities should be provided. For instance, the room occupied by Division XXVIII has 19 by 23 feet of floor space; in it are nine desks, occupied by nine men and women. In addition to the desks are book and file cases arranged against the wall and extending upon all sides of the room. In the room occupied by Division V the floor space is 35 by 20 feet in extent; in it are ten desks, occupied by ten persons; book and file cases extend around the room on every side. These instances differ only in degree from nearly all the rooms devoted to the business of this Bureau.

This is a lamentable condition for that important office, for which was intended the great building bearing its name, but into which so many other bureaus of the Department have been crowded that the original occupant is nearly deprived of room to live.

The different bureaus are far too large and numerous to be contained in the Patent Office building, and the yearly rent paid for outside accommodations would pay good interest on the cost of a building that would be capacious enough for them all and a safe depository of their records, which are of incalculable value.

The Secretary deems the recommendations of the Commissioner reasonable, and asks for the favorable consideration thereof.

GEOLOGICAL SURVEY.

From the report of the Superintendent of the Geological Survey, it is apparent that the examination of the rocks, minerals, ores, and soils of our country, and the construction of the topographical maps required for representing the character and distribution of these natural resources, have been actively carried forward during the year.

THE BUREAU.

As shown by the report of the Director, the Bureau comprises one geographical, twelve geological, six paleontological, and four accessory divisions. The chiefs of these divisions and most of their collaborators are experts of national or world-wide repute in their several lines of duty, and their work is conducted in accordance with a carefully devised plan well adapted to secure the best results at the least expense.

OPERATIONS.

The operations of the geographical division have been carried on in twenty-one States and Territories, and an area of 43,222 square miles has been surveyed and mapped.

A table showing the present condition of topographical surveys and the areas surveyed in 1888-'89 is to be found in the report of the superintendent.

With the completion of these topographical surveys and the engraving of the maps the construction of sheets of the final geological map was commenced; and with the view of devising the best methods of representing the results of the scientific researches of the Bureau upon it, the Director instituted a division of geological classification, and convened the experts employed under his direction for the purpose of discussing the best methods of constructing geological maps designed for the use of the citizens of the country. By this means a system specially adapted to the needs of the United States has been devised.

SUBJECTS INVESTIGATED.

Among the field operations carried on in thirty-three States are included an examination of the tidal marshes and other inundated lands of the Atlantic and Gulf slopes; studies of the soils and sub-soils and ground-water of a considerable area in New England; of the phosphates, green-sands, and other natural fertilizers of several Eastern and Southeastern States; of the iron ores and salt and sulphur deposits of the Gulf slope; of the soils and agricultural capabilities of extensive areas in the upper Mississippi Valley; of the gold-bearing deposits of California; of the rock-gas and heavier bitumens of Indiana, Ohio, West Virginia, and other portions of the country; of the

mines of coal and the precious metals in Colorado; and many other minor studies of mineral resources.

QUICKSILVER.

Especially important have been the researches made upon the quicksilver of the Pacific Slope, and upon the iron ores of the Lake Superior region. The Director believes that the monographs on these subjects are among the most elaborate and exhaustive treatises upon special mineral resources ever published in any country.

MINES AND MINING.

One of the most valuable branches of the work of the Bureau to a large and growing portion of our population is that relating to the statistics of mines and mining; and a volume giving these and other information relating to such subjects is issued annually. The value of these natural resources of the country, which it is the special province of the Bureau to ascertain and publish to the world, is indicated by the accompanying table showing the metallic products of the United States in 1888:

	Quantity.	Value.
Pig-iron, spot value.....long tons..	6,489,738	\$107,000,000
Silver, coining value.....Troy ounces..	45,738,632	59,195,000
Gold, coining value.....do.....	1,604,927	33,175,000
Copper, value at New York City.....pounds..	231,270,622	32,833,954
Lead, value at New York City.....short tons..	180,555	15,924,951
Zinc, value at New York City.....short tons..	55,903	5,500,855
Quicksilver, value at San Francisco.....flasks..	33,250	1,413,125
Nickel, value at Philadelphia.....pounds..	195,182	115,518
Aluminium, value at Philadelphia.....pounds..	19,000	65,000
Antimony, value at San Francisco.....short tons..	100	20,000
Platinum, value (crude) at New York City.....Troy ounces..	500	2,000
Total		256,245,403

In addition to the metallic products, non-metallic minerals were produced during the year to the value of \$328,914,528, making a total of \$591,659,931.

MINERAL PRODUCTS.

The wealth of the annual mineral product of the United States continues to increase at an eminently satisfactory rate, as shown by the following table:

Product.	1885.	1886.	1887.	1888.
Metallic minerals.....	\$181,599,365	\$215,364,825	\$250,419,283	\$256,245,403
Non-metallic minerals.....	249,114,544	249,963,063	291,864,942	328,914,528
Total	428,713,909	465,327,888	542,284,225	585,159,931

Expressed in percentages, the increase by years from 1885 to 1888, inclusive, is respectively 8.64 per cent., 16.6 per cent., and 9.04 per cent. for each year over its predecessor. And it is worthy of special remark that the increase, particularly during 1888, is largely in the non-metallic minerals, the existence and uses of which are made known through scientific research, rather than through the application of old methods in the exploitation of well-known minerals.

RESULTS.

The U. S. Geological Survey has just completed its first decade, and it will be proper to summarize the results it has accomplished. The only portion of these susceptible of definite description and numerical statement are the reports, treatises and maps published. The influence of these publications on the economic progress of the country, the amount that they have practically added to the wealth of the country, by giving intelligent direction to the search for ores and other economic minerals, the waste that they have saved by marking out the regions in which it will be useless to search for desired substances, the time and money that have been economized by railway corporations, municipal corporations, and individual travelers through the use of the topographic maps—these results are covered by no census, and are not susceptible of estimate.

The additions to the national wealth accruing through the work of the Survey will merge with all other additions in the footings of the Eleventh Census, and can never be discriminated; but as the entire industrial progress of this industrial age is based on the achievements of modern science, so the immense store of knowledge gathered, classified, and interpreted by the Geological Survey can not fail to have greatly promoted our national welfare.

Among the results that may be tabulated are ten Annual Reports, thirteen Monographs, fifty-eight Bulletins, and five Statistical Papers.

In these various papers, which together constitute a library, there is a discussion of the geological structure of every State and Territory of the Union, and there are important results with reference to the occurrence and production of each great metallic and mineral staple of the country—iron, steel, coal, gold, silver, lead, copper, natural fertilizers, building-stones, rock-oil, rock-gas, artesian water, and mineral water.

Another subject of vast economic importance to which the Survey has turned its attention, and in regard to which it has effected an elaborate organization for future work, is the study of soils and the development of methods for the reclamation of waste lands. The work of preparing maps to show the distribution of soils goes hand in hand with the work of preparing maps to show the distribution of rocks. Great attention has been given to the subject of the reclamation of tidal lands and of other swamps. Important data concerning the oscillation of low-lying lands and consequent encroachment or recession of shores have been

gathered. The irrigation survey of the arid regions of the United States, as elsewhere described, has been organized under special Congressional direction.

The topographic maps prepared by the Bureau for the use of its geologists have been found of much value for various purposes. The demand for them is so great that special editions have been issued by States, and the better class of general maps prepared by map publishers throughout the country are based on the topographic maps of the Geological Survey wherever they are available. The maps engraved up to the present time are issued in 249 sheets, and represent an area of 350,000 square miles.

A table showing number, distribution, etc., of the atlas sheets engraved to June 30, 1889, is to be found in the Superintendent's report.

The subject of irrigation of arid lands, which has been already mentioned, will be included by the Superintendent in his special report to Congress.

CASA GRANDE.

The ruins in Arizona known as "Casa Grande," for which an appropriation was made by Congress at its last session under the items for the Geological Survey, have been visited by Mr. Morrison, a special agent for the Land Office, and upon his report they have been turned over to the Director of the Geological Survey, that he may carry into effect the purposes expressed by Congress in regard to them.

INDIAN AFFAIRS.

EDUCATION.

The improvement of the Indian service in all its branches has been an earnest purpose of the present administration.

It was determined at the outset to remove as far as possible the acknowledged evils surrounding many of the Indian agencies; to enforce the obligations of contractors to furnish supplies equal to samples; to protect the Indians from fraud and illegal intrusion on their reservations, and to advance the cause of education among them, so as to make that education not only practical and sufficient to train each individual to intelligent labor, but to so increase the number of schools, that the body of the Indian youth might be brought within them.

Among his first official acts the present Secretary framed a letter of advice addressed to each Indian agent, to be transmitted with his commission. This was by direction of the President. Each agent was informed that the office to which he was appointed was to be deemed of great interest to the Government and to the Indians who would be brought under his charge and direction; that sobriety and integrity must mark the conduct of every one connected or associated directly

or indirectly with the agency; that an improved condition in its affairs would be expected within a reasonable time, both as to the method of doing business and as to the condition of the Indians; *that the education and proper training of the Indian children and the agricultural and other industrial pursuits of the adult Indians must receive the agent's constant and careful attention, to the end that they might be advanced in the ways of civilization and made independent through self-support*; and that the commission transmitted could be held only upon the express understanding that the agent receiving it would use his utmost efforts to further these objects and purposes. The selection of Indian agents has been made with as much care as possible, and their course has been looked after with a scrutiny greater, it is believed, than has heretofore been exercised. The contracts for Indian supplies have been made under the most vigilant inspection of all samples offered, and the delivery of the goods is being watched with all the care the Department can give to it.

It is deemed that both of these points last named pertain immediately and forcibly to the education of the Indian. There is a school of experience and observation as important to him as to the white man. If the Indian agencies can be made the seats of sobriety and morality, instead of what they have so often been—places of the grossest licentiousness—the effect in elevating the Indians must be very great; for the former practices were most demoralizing. If the Indian in the supplies he obtains finds that he is receiving a justice in measure and an excellence in quality before unknown, he will be in a better condition to yield readily to the other civilizing influences brought to bear upon him than if he feels himself the subject of constant imposition. As wrongs inflicted upon him have heretofore led him to vengeance, so, it is believed, will right subdue and civilize him.

Beside this general treatment individual education of the Indians in the schools has received from the beginning of the administration, and will continue to receive, increased attention. The subject has been much discussed both in preceding reports and in Congress; but it will never be exhausted until the Indian has become self-supporting. That was the condition in which he was found by our forefathers, however savage the means of maintenance, and it is to this state of independence we must restore him by the only way civilization will permit—that of his own intelligent labor. The results of efforts heretofore made for the civilization of the Indians are convincing that it is to be mainly effected by the education and proper training of their children. Little can be accomplished for the elevation of those who have passed the period of their youth and are habituated to the customs of their race. Our Government for years has shown a great willingness to train their rising generations for usefulness and to qualify them as good citizens, and there is no purpose more worthy attention than that of relieving their present physical suffering and of elevating their character.

But it would be unjust to previous Secretaries and many able legislators, to claim that all the work is yet to be done. A great deal has already been accomplished, the results of which have been most beneficial, and by the broader and more systematic application of these results alone, it is deemed that the problem of making the Indian self-supporting may be solved.

To maintain this statement, and in order to emphasize the recommendation I shall make, that all the youth of the Indians be brought within the folds of the Indian schools, I submit a few statistics and reflections thereon. There are already 239 Indian schools supported by appropriations made by Congress, 147 of which are controlled directly by the Indian Bureau, and the average attendance wherein is between eleven and twelve thousand pupils. The number of Indians in our country (not counting those of Alaska) is about 250,000; they occupy or have control of about 116,630,106 acres.

The number of children of school age is estimated to be..... 40,000
Under school age..... 10,000

Making a total of 50,000

The following table shows the number, capacity, and cost of schools, the number of employes and enrollment and average attendance of pupils during fiscal year ended June 30, 1889.

Kind of school.	No.	Capacity.	Enrollment.	Average attendance.	No. of employes.	Cost to Government.
<i>Controlled directly by Indian Bureau:</i>						
Boarding-schools	63	6,286	4,842	3,581	569	\$524,262.03
Day-schools.....	77	3,083	2,863	1,744	185	58,630.78
Industrial training-schools	7	1,760	1,955	1,631	219	286,182.71
Total Government-schools	147	11,129	9,660	6,956	973	869,075.52
<i>Conducted by private parties:</i>						
Under contract with Indian Bureau:						
Boarding-schools *.....	59	5,686	4,038	3,213	538	299,993.18
Day-schools.....	26	1,486	1,307	662	43	16,138.79
Schools specially appropriated for by Congress	7	970	779	721	131	108,668.67
Total	92	8,142	6,124	4,596	712	424,800.64
Aggregate	239	19,271	15,784	11,552	1,685	1,293,876.16

* Four of these schools are conducted by religious societies; which employ the teachers. Government assists these schools, without formal contract, by issuing rations and clothing to the pupils.

The following table shows the attendance, cost, etc., of training-schools and of other schools specially appropriated for during fiscal year ended June 30, 1889.

Name of school.	Location.	Number pupils.	Rate per annum.	Capacity.	Number of employees.	Enrollment.	Average attendance.	Cost to Government.
<i>Controlled directly by Indian Bureau:</i>								
Albuquerque training	Albuquerque, N. Mex.	*	\$175	200	29	219	172	\$30,100.00
Carlisle training	Carlisle, Pa.	167	167	500	56	625	595	81,000.00
Chemawa training	Near Salem, Oregon	175	175	250	35	193	156	29,257.88
Chilocco training	Chilocco, Ind. T.	173	173	200	28	203	155	28,421.82
Genoa training	Genoa, Nebr.	175	175	200	27	191	160	36,250.00
Grand Junction training..	Grand Junction, Colo.	175	175	60	5	28	16	6,793.24
Haskell Institute	Lawrence, Kans.	175	175	350	39	496	377	74,359.77
Total				1,760	219	1,955	1,631	286,182.71
<i>Specially appropriated for:</i>								
Eastern Cherokee training	Swain County, N. C.	80	150	80	12	82	80	10,000.00
Hampton Institute	Hampton, Va.	120	167	150	31	127	116	19,372.00
Lincoln Institution	Philadelphia, Pa.	200	167	260	30	215	208	33,400.00
St. Benedict's Academy ..	St. Joseph, Minn.	50	150	175	13	50	48	8,271.35
St. John's Institute	Collegeville, Minn.	50	150	200	7	55	50	5,105.32
St. Ignatius Mission	Flathead Mount.	150	150	400	20	176	153	22,500.00
White's M. L. Institute ..	Wabash, Ind.	60	107	80	18	74	66	10,020.00
Total		710		1,345	131	779	721	108,668.67
Aggregate				3,105	350	2,734	2,352	394,851.38

* Number of pupils not given.

Through many trials and long experience, as well as through the exercise of signal ability by the superintendents and their assistants, these schools have reached a high development, and strike with astonishment any one who has never beheld them, and thus had demonstrated to him both the Indian's adaptability to school life and industrial training, and the wisdom of the Government in its organization and support of these excellent institutions.

Attention is particularly called to the school at Carlisle, Pa., not by way of invidious comparison with others, but as an instance of what the Government has accomplished. The system therein adopted by Captain Pratt, its able superintendent, is an excellent example of theory carried into practice and thus shown to be reliable. He has had for his object the preparation of the Indian youth for physical labor guided by school education, and by means of this combination fitting him to *earn his own living*.

The pupils, taken from various tribes and of both sexes, are educated together. The gradation of study is well defined and based upon an experience now extending over many years. The studies begin with the rudiments of learning, and reach to the high branches of primary education. With the teaching of letters is combined daily manual labor; labor

whose products are valuable, supplying not only clothing for the scholars themselves, but making many articles for sale, from which a considerable revenue is derived. During the year before last this revenue amounted to \$10,000, and during the last year to \$12,000. These pupils also help to till the fields, to take care of the live stock, to sow and reap. Every boy and girl old enough to be effective is required to work one-half of each day, except Sunday. The good Indian there is he who performs his daily task, and the best is he who performs it most skillfully and efficiently; all being instructed in the school-room and in the workshop, that the purpose of the Government is to enable them to become self-supporting, hard-working, and thus independent American citizens. The scholars are taught most excellent manners, and, both by precept and example, the principles of morality and honor.

It was the good fortune of the present Secretary to preside at the exercises of a graduating class of fourteen this year and to present to them their diplomas. He was thus brought to scan closely their composition and elocution, and the general behavior of that portion of the audience where all the other Indian scholars were congregated; and he can say without hesitation that he has seen few school exhibitions that excelled those at Carlisle, whether the thought, style, or elocution of the speaker be considered or the intelligence, cheerfulness, and good manners of the Indian audience.

The following table exhibits the grading of studies for the first two years, the fifth year, and the last year, and length of pupilage at this school:

First grade, two years; language, Words, sentences from objects, pictures, etc.; writing from blackboard copies lessons from book in script on slate; tracing books; First Reader complete. Numbers: Grube to 40; add and subtract to thousands; multiply to thousands by one figure; practical examples.

Fourth grade, fifth year: Third Reader; primary arithmetic, using book through common and decimal fractions; writing, books Nos. 5, 6, and 7; dictation, memorizing, and recitation continued; drawing; primary geography completed; language, part 1, book 1, "Hyde," using book; hygiene; oral history.

Ninth grade, tenth year: Fifth Reader; arithmetic, complete; language; analysis, composition, general review; geography, general review in advanced book; civil government; natural philosophy, elements.

It has also been the practice there for years to let the scholars out during such periods of the year as would least interfere with their studies at the school itself, to serve on farms or in private families, and thus to gain the advantage of a home life among our people. This practice is so conducted as on the one hand to enable the scholars to earn money, which becomes their own, and on the other, *to help many of them who are taken upon the rolls of the ordinary common schools to attend them along with the white children.* Thus both at home and at school they profit by the civilization surrounding them. They are excluded from all Indian influence, the boys and girls being severally "homed" in different districts.

Nearly four hundred of these Indian pupils were thus placed during the last fiscal year from Carlisle alone, and I am told by the superintendent the number could be increased to not less than a thousand if the proper means were furnished by Congress. The applications for such pupils are constant from all portions of the surrounding country. They are found apt to learn, industrious in service, and docile in character. Agents of the Carlisle school visit these pupils regularly, and both they and the persons with whom the children are placed (farmers chiefly) report to the superintendent monthly upon their condition and progress.

The signal success of the Carlisle school will not depend, as it has not heretofore, upon the selection of pupils of peculiarly bright minds or evident individual excellence. The Indian is quick to learn and responds to just treatment with alacrity in renewed efforts to deserve it.

By the example of the Carlisle training school (which is not insisted upon as in every respect the very best that can be, but as one of great excellence and well fitted for the end in view) we may see how far and how admirably the Government has already advanced in Indian education.

This school system, with its attendant practices, is worthy of adoption and expansion until it may be made to embrace all the Indian youth. It is a model produced by the Government's own generosity and by the ability of those selected by it for superintendents and teachers. It is not something newly discovered or to be advocated as a recent invention. It has been in full operation for years. In the department of letters it gives a good common-school education. In the department of labor it inculcates both a love for labor and a habit of working. It may be easily systematized so as to have its form adopted in schools of different grades, and so that its pupils may be gradually, when fitted and entitled, transferred to the white common schools.

It therefore seems but a step to extend this system so as to have it embrace and affect, with the co-operation of the church mission schools, the whole youth of the Indian tribes. This co-operation has long existed; the missions have placed much reliance upon it, and its sudden withdrawal would be neither generous nor fair. The national system may grow very rapidly and yet others be most welcome as coworkers in this benevolent cause; but the national system should have precedence, and in case of conflict it should be preserved and advanced.

When an Indian has been taught that he ought to work a great change has been wrought in him; when he does work profitably and intelligently he has been transformed indeed. This does not idealize him nor treat him in a sentimental way, but it puts him on the plane where our own people have had to work out their fortunes in the hand-to-hand struggle with the forces of nature. It would not be reasonable, if it were possible, to give the Indian a better education than our

father's were able to enjoy in the earlier period of our history, when the greatest national achievements were accomplished and the foundations of success were laid.

Undoubtedly the expense to the Government will be apparently increased for a time; but a little reflection will show this temporary increase will soon be overcome by decreased expenses in other directions.

From the following tables, furnished by the Indian Bureau, can be readily gathered the items for expenditures of schools on the one hand and for the support of the Indians on the other by gratuities, annuities, and incidental obligations.

Table showing appropriations for 1888-'89 and 1889-'90.

Appropriations.	1888-'89.	1889-'90.	Increase.	Decrease.
Fulfilling treaties with Indian tribes, permanent	\$1,001,215.50	\$1,428,654.90	\$427,439.40	
Fulfilling treaties with Indian tribes, annual....	1,656,240.00	1,585,796.84		\$70,443.16
Support of Indian tribes, gratuities.....	754,500.00	702,500.00		52,000.00
Support of Indian schools	1,352,765.00	1,379,568.13	26,803.13	
Incidental and contingent expenses	169,000.00	169,000.00		
Current expenses.....	877,420.00	818,331.50		59,088.50
	5,811,140.50	6,083,851.37	454,242.53	181,531.66
Net increase.....			272,710.67	

It is noted by the Commissioner that, under the head of "Fulfilling treaties with Indian tribes, permanent" are such specified sums as are required to be appropriated annually under existing treaties, either for a certain number of years or for an indefinite period.

A number of treaties contain provisions for clothing, subsistence, agency and school employes, etc., to be furnished by the United States for a certain number of years, but such provisions do not state specifically the amount of money that must be appropriated. These amounts are annually approximately estimated by this office, and the sums so appropriated can be used only for expenditures incurred during the fiscal year for which the appropriations were made.

The table following shows the money available and expenditures made during fiscal year ended June 30, 1889:

Sources.	On hand July 1, 1888.	Expended during year.
Fulfilling treaties with Indian tribes, permanent.....	\$1,001,215.50	\$376,557.43
Fulfilling treaties with Indian tribes, annual	1,656,240.00	1,506,240.00
Support of Indian tribes, gratuities.....	754,500.00	733,439.90
Support of Indian schools.....	1,352,765.00	1,131,270.02
Incidental and contingent expenses, Indian service.....	169,000.00	158,347.42
Current expenses	877,420.00	772,773.79
Interest on trust funds.....	860,355.19	713,046.82
Total	6,671,495.69	5,391,675.38
Balances, permanent:		
Of funds appropriated under treaty stipulations of a permanent character	414,675.50	414,675.50
Of funds appropriated for erection of school buildings at various points	119,620.99	37,814.89
Of appropriations for negotiating treaties with certain Indian tribes, surveying and allotting Indian reservations, digging ditches, and proceeds of lands.....	428,156.11	224,879.98
Of Indian moneys, miscellaneous.....	104,903.87	39,993.11
Of interest on trust funds	656,023.44	.....
Total	1,723,379.91	717,363.48
Aggregate	8,394,875.60	6,109,038.86

If from the sum expended during the year, \$5,391,675.38, we deduct support of Indian school, \$1,131,270.02; interest on trust funds, \$713,046.82; fulfilling treaties with Indian tribes, permanent, \$376,557.43, making \$2,230,874.27, the balance is \$3,160,801.11; and this we may assume to be nearly the sum required each year to supply the Indian tribes with food, blankets, clothes, medicine, and implements, either as absolute gratuities or under treaties that will expire within a few years.

It is not necessary to enter into nice calculations to show from this general statement that, though the appropriation for schools should be doubled or more, its constant tendency from year to year and final effect would be to relieve the Government of the corresponding and much greater expense, that must otherwise go on for an indefinite period.

We should remember in this connection that the system of allotments of lands which has been carried on earnestly by the Government for a number of years is still being pursued vigorously, and that its great object is to separate the allottee from his tribal relations, and put the older Indians upon lands they may use individually for their support.

Moreover, the allotment of lands is attended by citizenship for the Indian, and that citizenship ought to bring with it the privileges of the

common schools of the white man in all its grades; thus wherever the Indian receiving his allotted land, cultivates it and has his family within the borders of any State where the white men have a common-school system, the Indian should become privileged to the use of that system of schooling the same as any one else; but of course this could not be effected without taxation of the Indian on his lands, or a substitute through payment by the Government itself of such taxes.

It has been suggested to the Secretary that the use of the common schools in this general effort to civilize the Indian should be resorted to at every opening opportunity; that in the schools established by the Government itself, where it is a part of the system to let out the scholars for labor among the white people at proper wages, they should be introduced, so far as would be just and legal, into the common schools of the districts wherein they are thus permitted to reside; and where the Indians through the allotment system are elevated to citizenship, the Government should support them by whatever pecuniary means may be necessary to gain a place in the common schools. The United States ought not to expect, of course, that any of the school districts should be at the expense of teaching the Indians unless willingly received and the expenses met by our National Government.

It is not thought that there would be any race antagonism between the whites and the Indians, as none has exhibited itself in schools where Indians have already been introduced among the other children.

With the allotments the reservation disappears, for after the allotments are made what remains is sold to the Government and the proceeds thereof become a trust fund, the interest on which is paid to the particular tribe, thus producing a reliable annual income.

In this connection a view of what funds the Indians already possess may be useful:

Table showing trust funds held at commencement of 1888-'89 and 1889-'90.

Trust funds.	1888-'89.	1889-'90.	Increase.
Principal.....	\$17, 097, 463. 32	\$20, 909, 556. 93	\$3, 812, 093. 61
Accrued interest, annual	860, 355. 19	1, 041, 513. 80	181, 158. 61
Accrued interest, balances.....	656, 023. 44	803, 331. 81	147, 308. 37
Total.....	18, 613, 841. 95	22, 754, 402. 54	4, 140, 560. 59

The increase of over \$4,000,000 arises from the sale of land by the Creeks, Seminoles, and Osages.

Of the \$20,909,556.93, principal, held in trust as above shown, the sum of \$7,984,132.76 belongs to the five civilized tribes in the following proportions :

Tribes.	Amount of principal.	Annual interest.
Cherokees	\$2, 625, 842.37	\$137, 469.33
Chickasaws.....	1, 308, 695.65	68, 404.95
Choctaws.....	549, 594.74	32, 344.73
Creeks.....	2, 000, 000.00	100, 000.00
Seminoles	1, 500, 000.00	75, 000.00
Total	7, 984, 132.76	413, 219.01

And the balance of the sum of \$20,909,556.93, amounting to \$12,925,424.17, belongs to a number of tribes, as stated below, and the interest thereon, at 4, 5, 6, and 7 per cent., as the case may be, is either paid to the respective tribes, or expended for their benefit.

Tribes.	Principal.	Tribes.	Principal.
Chippewas and Christian Indians ..	\$42, 560.36	Pottawatomies.....	\$184, 094.57
Delawares.....	874, 178.54	Sac and Fox of Missouri.....	21, 659.12
Eastern Shawnees.....	9, 079.12	Sac and Fox of Mississippi.....	55, 058.21
Iowas.....	171, 543.37	Santee Sioux.....	20, 000.00
Kansas.....	27, 174.41	Senecas.....	40, 979.60
Kaskaskias, Peorias, Weas, and Piankeshaws.....	58, 362.58	Senecas, Tonawanda band	86, 950.00
Kickapoos.....	130, 736.79	Senecas and Shawnees.....	15, 140.42
L Anse and Vieux de Sert bands....	20, 000.00	Shawnees.....	1, 985.65
Menomonees.....	153, 039.38	Stockbridges.....	75, 988.60
Osages.....	3, 162, 820.76	Shoshones and Bannocks	6, 000.00
Omahas.....	191, 766.77	Umatillas.....	59, 461.64
Otoes and Missourias.....	412, 116.39	Utes.....	1, 750, 000.00
Pawnees.....	284, 721.89	Total.....	12, 925, 424.17
Poncas.....	70, 000.00		

The balances of accrued trust-fund interest, as shown in the first table above, amounting to \$803,331.81, are applicable for such expenditures as from time to time may be found to be proper. It would be no wrong to the Indians who enjoy these revenues nor any violation of law to require a portion of them to be contributed to the support of schools for the training of their youth.

This national school system has had for its chief purpose, from the beginning, the conversion of the Indian into a citizen, with all the rights and all the obligations such citizenship confers or imposes. It has been carried on with fair success. The Indian agents are encouraging agriculture; the allotments are being made constantly; and many Indians to-day are earning their living, surrounded by their families, on their farms. A trust fund has accumulated for many and will for

more, that is and will continue to be a constant source of relief to them, and which may be, and should be, applied in part to their training. Excellent schools have developed, well adapted to improve their condition and help them on their way to self-support and hence independence. Supported by the spirit that now is believed to exist both among the executive officers of the Government and the legislators of the country, and the increasing interest and good-will of the people of all situations in life and of all denominations which is daily exhibited, there is no reason why this system should not be expanded and used for the complete solution of the Indian problem.

It is recommended, therefore, that we advance with this system which has been tried and enlarge the number and capacity of the schools, so that there will not be an Indian child of school age that can not, if it desires, receive an education, and that those who do not willingly avail themselves of the privileges afforded may be compelled to do so by authority based upon judicious legislation. This view is taken from the vantage ground of the actual results already attained; and, while we should not in any degree retard but cordially support further amelioration of the Indians' condition, by missions and all good means, it is believed that our Government has been generous and wise in its efforts to educate them and that the best course for it is to conserve what has been found to be good, and to apply that to increased numbers.

With the suggestion, briefly stated above, it is recommended that all the schools supported by Government funds should be brought under the same system; that the methods of teaching, the books, and practices should be the same throughout all, having, of course, if necessary, different schools for different grades and transferring the pupils, as they progress, from one to another. By this method schools may be erected near the camps for the purpose of teaching the rudiments to the pupils before they are sent on to the other schools. The whole should be under a common control and regulated as one system, the head of which will necessarily be the Commissioner of Indian Affairs, assisted by the Superintendent of Indian Schools.

ALLOTMENTS OF LANDS TO INDIANS.

Since the last annual report the business of allotments of lands to different tribes has proceeded with much success, the particulars of which are given in the Commissioner's report.

The Indians generally complain that under the general allotment law their wives are deprived of their legal and rightful share in the tribal property, and that their children and orphans do not receive as much as the adults. For these and some other reasons the Indians on the Devil's Lake Reservation are opposing the allotment.

It is provided in section 5 of the general allotment law—

That, at any time after lands have been allotted to all the Indians of any tribe as herein provided, or sooner if in the opinion of the President it shall be for the best

interests of said tribe, it shall be lawful for the Secretary of the Interior to negotiate with such Indian tribe, for the purchase and release by said tribe in conformity with the treaty or statutes under which such reservation is held, of such portions of this reservation not allotted as such tribe shall, from time to time, consent to sell, on such terms and conditions as shall be considered just and equitable between the United States and said tribe of Indians, which purchase shall not be complete until ratified by Congress, and the form and manner of executing such release shall also be prescribed by Congress.

No appropriation is available for conducting such negotiations with the Indians who may desire to dispose of any portion of their reservation not needed for allotments. Few, if any, of the Indians now taking allotments have the means necessary to enable them to build houses and purchase implements, etc., with which to begin the work of practical husbandry upon their tracts. To secure such assistance many of them would readily enter into negotiations for sale of their surplus land, and it is necessary that a small appropriation for the purpose be made, in order that the provisions of the law may be complied with.

INTRUDERS IN THE INDIAN TERRITORIES.

Constant vigilance is exercised to prevent unlawful intrusion upon the lands of the Indians, and so fully have the laws and orders on this subject been enforced that there are no complaints except in cases which have had treatment by my predecessors without effecting a cure. These places are the Round Valley, Klamath River, and Mission Reservations in California, mentioned elsewhere in this report, and the country of the five civilized tribes in the Indian Territory.

The agent for the Union Agency reports that there are among the five civilized tribes 35,000 persons whom he classes as "criminals, principally refugees and their families from the border States, whose influence is corrupting, their touch is polluting, and their example is demoralizing." Besides these he reports the presence of 4,000 claimants to Indian citizenship and about 3,000 sojourners, visitors, etc., all in addition to the population of 65,000 natives, adopted whites, and freedmen.

Those classed as criminals and refugees from justice, while certainly not a desirable element for residence among the Indians, seem to avoid annoyance to the tribes so as to seldom cause complaints or requests for their removal. But those who are classed as claimants to Indian citizenship have long been the subject of complaints and of discussions which have not remedied the evils of their situation. Most of them, upon general invitation of the Indian nations, especially the Cherokee Nation, have asserted claims to membership therein, and while prosecuting and awaiting the adjudication of their claims, have for a number of years, under the encouragement of the Indian national authorities, resided within the Territory, opened farms and made valuable improvements, only to find ultimately that their claims are denied, or if once admitted, tried again and rejected. They are thereupon declared intruders, whose removal by the Government of the United States is de-

manded in fulfillment of treaty obligations. Their improvements are offered, under the laws of the Indian nation, at sheriff's sale, only to be sacrificed, because no one but a recognized member of the nation is permitted to purchase them.

The Department has not suffered this injustice to be inflicted upon people thus invited and encouraged, and whose good faith as claimants to membership in the Indian nations is shown. It has held that if they are intruders the Indian nations have no jurisdiction over them, and can not lawfully dispossess them of their property. The Department has declined to cause their removal as intruders until they shall have been paid the fair and reasonable value of their property.

The Indian nations themselves are too far responsible for this state of affairs to be allowed to deal in a summary and unjust manner with the unfortunate people who have been lured among them in the pursuit of that to which they believed themselves justly entitled.

The situation is full of embarrassment, but it is confidently hoped that Congress will devise some measure to relieve it.

UNITED STATES COURT FOR THE INDIAN TERRITORY.

The United States court for the Indian Territory, established by the act of March 1, 1889 (25 Stat., 783), is in operation, and is having a wholesome effect as a conservator of the peace, order, and well being of the inhabitants of that Territory. It is believed that it will prove a means of relief to this Department and to the Indian Bureau from many of the perplexing questions arising between the whites and Indians that come here for settlement. There is a wide field of usefulness for this tribunal if jurisdiction can be conferred upon or secured to it over many and varied questions of dispute affecting the rights of persons and property in the Indian Territory, especially within the country occupied by the five civilized tribes, where exist large numbers of people having no well-defined or recognized status among those nations of Indians.

If existing treaties interfere to prevent Congress from enlarging the jurisdiction of the court, so that it may extend to such questions as those of claims to membership in the nations; to the determination and enforcement of rights of the Delawares and of the Shawnees in the Cherokee Nation; of the status of the freedmen of the five civilized tribes, to whom all rights and interests are denied by some of the nations, and only partially admitted by others, and to many similar questions, then it seems the time has come for negotiations with these nations for yielding some of the rights and privileges reserved to them by treaties over such matters. Such concessions are no less desirable and important than the cession of unoccupied portions of their domain. They have long enjoyed an advanced stage of civilization, but for their further advancement it is believed to be necessary they should be clothed with the privileges, duties, and obligations of citizenship and brought wholly under the laws of our Government.

The money paid to the Cherokees, as due under appropriation, for land within the Cherokee Outlet upon which other Indians had been settled, was distributed among those who were Cherokees of blood, ignoring the rights of the Cherokee freedmen and of the Delawares and Shawnees incorporated among them to share in the distribution thereof. To correct this injustice Congress, by act of October 19, 1888 (25 Stats., 609), made an appropriation of \$75,000, to be divided among the excluded persons, when those entitled thereto shall have been ascertained in the manner prescribed. This is now being done, though it is a work that will require patient and careful consideration.

RAILROADS THROUGH INDIAN RESERVATIONS.

In the report of the Commissioner of Indian Affairs will be found, briefly stated, the important transactions which have transpired since the last annual report of that office concerning railroads to which grants of right-of-way have been made by law across various Indian reservations. By reference thereto it will be seen what steps have been taken, and how far they have been successful in securing the consent of the Indians where such consent is required by the acts as one of the conditions of the grants, what has been done by way of adjustment of differences growing out of the operations of the railroads on the reservations under these grants, and also a recital of the cases in which legislation is required ratifying agreements negotiated in former years with Indians, under which railway companies have been permitted to construct and operate railroads upon reservations without having first obtained the authority of Congress therefor. The cases in which such confirmatory legislation is required are—

(1) The Jamestown and Northern Railway through the Devil's Lake Reservation, Dakota, constructed in 1885, under an agreement of 1883.

(2) The Chicago, Milwaukee and St. Paul Railway, whose road was constructed under an agreement of 1884, through the Lake Traverse Reservation, in Dakota.

(3) The Northern Pacific Railway through the Yakima Reservation, in Washington Territory, constructed under an agreement of 1885.

(4) The Carson and Colorado Railway, constructed through the Walker River Reservation, in Nevada, under an agreement of 1882.

Each of these railways is in operation; the Indians concerned agreed to the construction thereof through their lands, and draughts of necessary legislation on the subject have heretofore been laid before Congress. It is important that the existence of railroads through these reservations shall not be suffered longer to continue without necessary law therefor, in order that money paid by the railway companies for such right of way (which in several cases now stands to the credit of the Commissioner of Indian Affairs) may, in accordance with the agreements be paid over to the Indians or expended for their benefit. They can not readily understand why one part of their agreement is com-

pleted—the construction of the railroads through their lands—while the other part—the payment to them of the money for the right of way—is not carried out.

EXTINCTION OF INDIAN TITLES.

During the last session of Congress much legislation was enacted looking to the extinguishment of the title of certain Indians to large areas of land occupied by them.

THE CHIPPEWA INDIANS OF MINNESOTA.

A commission, composed of Hon. Henry M. Rice, of Minnesota; Rt. Rev. Martin Marty, of Dakota; and Joseph B. Whiting, of Wisconsin, was appointed to conduct negotiations with the Chippewa Indians of Minnesota, as provided in the act of Congress approved January 14, 1889 (25 Stats., 642), which aims at the segregation of all the Chippewa Indians now occupying reservations in Minnesota upon the White Earth Reservation, except those residing upon the Red Lake Reservation, and for extinguishment of the Indian title to the whole of the several reservations in said State except the White Earth and the Red Lake Reservations, and also to so much of the White Earth and Red Lake Reservations as is not required to fill allotments to the Indians. The work of this Commission has progressed favorably, and the required consent of the Indians to the provisions of the act has been given; but the report of the result has not yet reached the Indian Office.

If the Commission has been successful in obtaining the relinquishment by the Indians of all the reservations outside of the White Earth and Red Lake, and should all the Indians occupying or interested in said reservations remove to the White Earth Reservation and take allotments upon it, there would be for disposition under the provisions of the act an aggregate of about 750,000 acres in the vacated reservations.

There are about 7,000 Indians in the State of Minnesota, exclusive of those upon the Red Lake Reservation, and should they take allotments upon the White Earth Reservation, as contemplated, it would require about 500,000 acres to meet the requirements of the act.

This reservation contains an area of about 796,000 acres, and as there is undoubtedly some waste land there not fit for agriculture, and considering other contingencies that may arise, the whole of the reservation may be required for the future home of the Indians.

The Red Lake Reservation contains an estimated area of 3,200,000 acres, and as there are between eleven and twelve hundred Indians residing upon that reservation, it would require from 100,000 to 125,000 acres to meet the requirements of the act for allotments to the Indians on that reservation, leaving something over 3,000,000 acres, and making a total of about 3,850,000 acres to be disposed of under the act.

A large portion of land, the title of which is sought to be extinguished, is covered with valuable pine timber, which land with the agricultural

land is to be sold and the proceeds applied for the benefit of the Indians, as in the act set forth.

THE SIOUX.

A statement of the facts in relation to the Sioux Indians in Dakota has already been given in this report.

THE RED PIPESTONE RESERVATION.

Under the provisions of the act of Congress, approved March 2, 1889 (25 Stat., 1012), 492.25 acres of land, with the improvements thereon, embraced with the Red Pipestone Reservation, in Minnesota, have been appraised, as has also the strip of land 100 feet wide across said reservation, occupied by the Cedar Rapids, Iowa Falls and Northwestern Railway Company, and the damage to the balance of the lands of said reservation by reason of the occupancy of said strip for railroad purposes.

A Commission, appointed to present the provisions of the act to the Yankton-Sioux Indians for their consent, has reported that they refuse to consent thereto, except as to the provisions thereof relating to the said railway company, to which they have given their formal assent in writing.

CŒUR D'ALENE INDIANS.

The Commission appointed by this Department under the clause in the Indian appropriation act of March 2, 1889 (25 Stats., 1002), to negotiate with the Coeur d'Alene tribe of Indians, for purchase from them of so much of their reservation located in Idaho as is valuable chiefly for minerals and timber, as the tribe shall consent to sell, has concluded and submitted an agreement which will be presented to Congress.

LEMHI AGENCY, IDAHO.

The Indians occupying the Lemhi reservation in Idaho have had presented to them, as required, and have refused their consent to the provisions of the act of February 23, 1889 (25 Stat., 687), providing for their removal to the Fort Hall Reservation.

BITTER ROOT VALLEY.

General H. B. Carrington, of Hyde Park, Mass., has been recently appointed a special agent by this Department, to visit the Flathead Indians in the Bitter Root Valley, Montana, for the purposes required by the provisions of the act of Congress approved March 2, 1889 (25 Stat., 871), and has been successful in his mission.

POTTAWATOMIE AND KICKAPOO INDIANS IN KANSAS.

The Commission appointed under the clause in the Indian appropriation act of March 2, 1889, providing for negotiations with the Prairie Band of Pottawatomie and Kickapoo Indians, in Kansas, for the sale of

a portion of their lands and for the allotment of the remainder in severalty, has made a report of its proceedings, so far conducted, which shows that these Indians are not disposed either to relinquish title to any portion of their land or to take allotments in severalty.

The Indians are said to be influenced in their opposition to the proposed measures by the presence upon their reservations of a large number of former members of the tribes, now associated with them by intermarriage, who, having heretofore taken lands in severalty, with no restrictions as to alienation, have parted with their allotments and are now paupers, living upon the charity of those of the tribe to whom the existing reservation belongs.

The work of this Commission is at least temporarily suspended.

THE CHEROKEE INDIANS.

In a previous portion of this report have been noted sufficiently the negotiations now pending with the Cherokees for the cession of the Cherokee Outlet.

SAC AND FOX INDIANS IN KANSAS AND NEBRASKA.

The Department has again caused to be presented for the consideration and action of the Sac and Fox Indians in Kansas and Nebraska, the provisions of the act of March 3, 1885 (23 Stats., 351), relating to the sale of their reservation, now occupied by them and located in part in Kansas and Nebraska, and their removal to the Indian Territory, together with the provisions of the amendatory act of January 26, 1887 (24 Stats., 565), under which those who desired to remain where they now are and take allotments in severalty might do so.

The report of the action of these Indians on the subject shows that they unanimously refused their consent to the sale of the reservation, and that they also declined to take allotments in severalty, because under the provisions of the last-named act their married women were excluded from a share in the tribal estate, and because of the very limited quantities allowed to their children under eighteen years of age, holding that an equal share or distribution of the tribal property is the only just and fair method for its final disposition.

These Indians have since sent in a petition, dated October 5, 1889, praying that their lands be allotted to them in accordance with the provisions of the third article of their treaty of 1854 (10 Statutes, 1074), saying that they prefer to have their "lands allotted under the provisions of said treaty and in equal quantities per capita to each man, woman, and child."

The article referred to reads as follows, viz :

The President may cause to be surveyed, in the same manner in which the public lands are surveyed, the reservation herein provided for the Sacs and Foxes of Missouri, and may assign to each person, or family, desiring it, such quantity of land as,

in his opinion, will be sufficient for such person or family, with the understanding that he or they will occupy, improve, and cultivate the same, and comply with such other provisions as the President may prescribe. The land thus assigned may hereafter be confirmed by patent to the parties, or their representatives, under such regulations and restrictions as Congress may prescribe.

In view of this expressed desire of these Indians, located in the midst of a highly cultivated community, to take their lands in severalty in the manner provided in this treaty, and their refusal to take it under the provisions of the laws above referred to, Congress may find it proper to accede to their wishes, and make necessary provisions especially for as an equal distribution of their whole reservation among them which would not give to each individual more than about one hundred acres.

OKLAHOMA.

The questions as to this domain have been discussed in a previous portion of this report.

INDIANS IN CALIFORNIA.

HOOPA VALLEY RESERVATION.

The Hoopa Valley Agency, located in the extreme northern part of the State of California, and which has since 1877 been under charge of the military officer stationed on the reservation, was by the last Indian appropriation act consolidated with the Mission Tule River Agency, situated over 900 miles away, in the southern part of that State. The bare statement of the case or a glance at the map is sufficient to show how utterly impossible it is for an agent in charge of two or more bodies of Indians so widely separated to give to either the personal attention their interests demand, or to give even occasional superintendence to the duties pertaining to the respective reservations without great loss of time and considerable expenditure of money in traveling from one to the other.

The consolidation of the two agencies is not for the best interests of the service or of the Indian. The superintendence of the affairs of the Hoopa Valley Agency by the military officer heretofore in charge thereof has been very helpful in advancing the Indians there toward civilization and self-support, and the management has been satisfactory to this Department. They number over seven hundred. If, therefore, provision is not made for an agent there it is recommended that the former status be restored by disconnecting it from the Mission Tule River Agency.

ROUND VALLEY RESERVATION.

The lands reserved for the use and occupation and for the permanent homes of the Indians now belonging to the Round Valley Reservation have been so largely encroached upon by white persons that there is

now left to the use of the Indians not more than 5,000 acres of the 102,000 acres within the reservation boundaries. The invasion of the lands of these Indians has grown worse from year to year, and unless some remedy is provided these dependent and defenseless beings, who have so long peacefully borne the wrongs inflicted upon them, will soon be without an abiding place. All the resources of this Department, of the Department of Justice, and of the military arm of the Government have thus far failed to dislodge the intruders, or to keep back or restrict their encroachments upon the lands of the Indians.

The intended relief provided by legislation heretofore, has served to benefit the invaders of the lands more than the Indians. A full history of the matter is clearly set out in the report of the Commissioner of Indian Affairs. Draft of legislation heretofore prepared to meet the case has passed the Senate at several of the recent sessions of Congress but always failed to receive any final action in the House of Representatives. It is earnestly hoped that the necessary legislation to cure the evils so flagrant and glaring may be speedily enacted. The Indians are ready, able, and willing to take allotments of land in severalty. They should be settled upon individual holdings with security of title. They may then commence the long delayed work of making for themselves the quiet and peaceable homes they deserve.

MISSION INDIANS.

Some twenty reservations have been set aside for the use and occupation of the Mission Indians since 1875, varying in extent from 88,475 to 80 acres, and aggregating a total area of 223,954 acres. It has been found that some of these reservations, by reason of incorrect description of boundaries, do not include the lands particularly designed to be reserved, and upon which the Indians are actually located. In others, the Southern Pacific Railroad Company claims the odd sections, and private parties claim to have existing rights on other portions. There are some settlements of Indians on Government lands not set off as reservations, in some instances not surveyed, and some of the Indians are located within the limits of private grants, and they are being constantly threatened by suits in ejectment or by acts of intimidation designed to drive them off. The occupation by the Indians of these lands in dispute antedates by many years, it is said, the origin of the alleged rights of those asserting adverse claims thereto.

Litigation with parties who have been removed from the reservation is also pending.

The correct ascertainment and determination of the rights of persons who have asserted claims or made settlement on the reservations should not be longer delayed. A bill providing a commission for this purpose has been frequently urged upon the attention of Congress, and it has several times passed the Senate but has failed to receive final action in the House of Representatives.

The necessity for such legislation is again reported by the Commissioner of Indian Affairs to be of the utmost importance for the welfare of these Indians, and it is hoped that the approaching session of the Congress will not adjourn without providing proper measures concerning these lands.

INDIAN DEPREDAATION CLAIMS.

The report of the Commissioner of Indian Affairs shows that the total number of Indian depredation claims filed in his office is 5,494, amounting to \$19,227,330; that of this number 54 claims, amounting to \$218,190.10, have been heretofore adjudicated; that under the provisions of law contained in the Indian appropriation act of March 3, 1888 (23 Stats., 376), and of May 15, 1886 (24 Stats., 46), providing for the investigation and submission to Congress of "certain Indian depredation claims," 933 claims, amounting to \$3,120,459, had, up to and including January, 1889, been reported to Congress with recommendation for allowance thereon of \$992,157.21; and that there were on file June 30, 1889, 4,507 claims, amounting to \$15,888,680.90, of which 1,374, amounting to \$5,479,759.02, are not considered, within the meaning and intent of the provisions of law above referred to, subject to investigation, for the various reasons set out in the report of the Commissioner.

If the investigation of this class of claims is to be continued in the manner now provided for, with a view to their ultimate settlement as the law contemplates, it would be well to authorize by appropriate legislation the investigation of all cases properly and justly entitled thereto, and to make ample provision for the service required by so increasing the appropriation for that purpose as to enable the Department to push the work to completion at the earliest possible date. This is necessary, not only in justice to the meritorious claimants, as every year's delay lessens their ability to substantiate their claims, but also for protection to the Government, as delay renders the perpetration of fraud more easy. Many of these claims have been pending for more than a quarter of a century, and their final adjudication should be as speedily effected as possible consistent with the thorough and careful investigation required.

SUPPLIES FOR INDIANS IN DISTRESS; EXHAUSTED.

The Indian appropriation act of March 3, 1885, contained this item:

To supply food and other necessities of life, in cases of distress, among the Indians not having treaty funds, arising from emergencies not foreseen or otherwise provided for, to be used at the discretion of the President, fifty thousand dollars; and a report of all expenditures under this provision shall be made to Congress at its next session thereafter.

The following statement shows the disbursements made from this fund to relieve the pressing needs of Indians in distress:

During 1885:

For the Eastern Band of Cherokees in North Carolina.....	\$499. 00
For the Chippewas of Lake Superior, in Wisconsin.....	1, 066. 00

During 1886:

For the Northern Cheyennes and Arapahoes of Tongue River Agency, Mont., under act of February 9, 1886 (24 Stats., 3).....	9, 709. 76
For the Mohave Indians of Arizona and California	2, 475. 00
For the Turtle Mountain Chippewas of Dakota	3, 000. 00
For the Pai Ute Indians of Nevada.....	1, 272. 47

During 1887:

For the Absentee Shawnees in the Indian Territory	300. 00
For the Refugee Cree Indians from British Possessions	5, 252. 43

During 1888:

For the Turtle Mountain Chippewas in Dakota	3, 000. 00
For the Kootenai Indians in Idaho	500. 00
For the Yuma Indians in California.....	5, 000. 00
For the Refugee Cree Indians from British Possessions	5, 974. 54

During 1889:

For the Chippewas of Lake Superior in Wisconsin	1, 729. 50
For the Kootenai Indians in Idaho	500. 00
For the Turtle Mountain Indians in Dakota.....	4, 884. 09
For the Sisseton and Wahpeton Sioux Indians of Lake Traverse Res- ervation in Dakota.....	2, 000. 00
For Refugee Cree Indians from British Possessions.....	3, 939. 70

Making a total amount expended of	49, 102. 49
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This appropriation of \$50,000 has enabled the Department during nearly six years past to afford much needed relief to a large number of Indians, who have thus alone been saved from great suffering and death from starvation and cold. As this fund has now been exhausted it is urgently hoped that Congress will provide another appropriation. The reports now coming in clearly indicate that there will be much distress among Northern Indians by reason of failure of their crops caused by the drought; particularly in the Northwest, and an appropriation immediately available is earnestly asked.

LOGGING ON INDIAN RESERVATIONS.

The cutting and sale of timber from lands occupied by Indians has heretofore been confined principally to the Menomonee Reservation, under the Green Bay Agency, Wisconsin, and to the Lac de Flambeau, Bad River, Lac Court Orielles, and Fond du Lac Reservations, under the La Pointe Agency, Wisconsin.

MENOMONEE RESERVATION.

During the three seasons last passed the sales of timber by the Menomonee Indians have amounted to the aggregate sum of \$262,900 for 26,270,780 feet of pine, and 1,302,625 feet of less valuable logs cut from dead and fallen timber and from green timber removed in clearing land for cultivation. Of that amount \$236,500 have been paid to them in cash after public sale of the logs, and the balance of \$26,400 has been

retained as a stumpage fund, and, with their consent, disbursed under direction of the Department for the needs of the poor, old, and helpless, and for the maintenance of their hospitals.

The cash payment made during the current calendar year amounted to \$138,500, and their agent reports that they have expended out of that amount over \$27,000 for horses, oxen, and cows; over \$17,000 for harness, wagons, agricultural implements, and fruit-trees; over \$6,400 for household furniture, including 40 sewing-machines; and over \$7,500 for new dwellings and stables and repairs to old ones; all in addition to payment of their debts for logging supplies and what was used for clothing and subsisting themselves and families.

On this reservation the Indians themselves cut and bank the logs, which are sold under the directions of the Indian Bureau. Their leading and most progressive men are reported to be unanimously in favor of the continuance of this method for conducting their logging operations.

LA POINTE AGENCY RESERVATIONS.

The present agent for the La Pointe Agency reports that for the four years last past the logging operations of the Indians on the Lac de Flambeau, Bad River, Lac Court Orielles, and Fond du Lac Reservations, carried on under the system of contracts made by them with lumbermen for the logs, have been as follows:

Four hundred and fifty-three million six hundred and seventy-five thousand two hundred and forty-nine feet cut, valued on bank at \$3,227,431.85, netting to Indians \$976,772.93, of which they received \$609,750.80 in cash and \$367,022.13 in merchandise, besides what was paid them for services rendered by such of them as worked in the logging camps. He further reports that had the Indians understood the value of this money, many of them would now be rich, but through inexperience, improvidence and an uncontrollable appetite for whisky, nearly all of the large amounts of money that went into their hands have been wasted for gewgaws and liquor, and, instead of benefiting themselves and their families, have been the means of injuring them mentally, morally, and physically. He further says that as long as those Indians get money as they have been getting it, they will get liquor and will continue to suffer, under the degradation inseparable from its use by them.

The contrast between the two last preceding cases, if correctly reported, is no less clear than important for the light it throws upon this heretofore troublesome subject. In the one case the Indians conducted their own logging, and performed the necessary labor therefor. In the other case white men conducted the logging, in which the Indians had no part, except such of them as worked for daily wages.

In the one case the Indians had an interest in the result of their own management and labor, and learned the value of money and how to best use it. In the other case, those who worked at all did so merely for hire, while the greater number remained idle, living by advances

made of scanty supplies required to meet their wants, while they waited for completion of the contracts for payment of any balances. Cutting their green timber was not an incident merely to clearing necessary land for agricultural purposes, but was solely to market it to procure money which when received was not wisely used.

I am led to conclude from the facts thus presented that cutting green timber from lands occupied by Indians should while the lands are so held and occupied, be allowed only for purposes of clearing tracts for cultivation when the land is adapted to such use, and only so much as is so used. If not so adapted it seems to be unwise to allot it to Indians, and equally as unwise to permit them to sell the timber therefrom to contractors, and to receive and squander the proceeds thereof, which ought to be sufficient, if gathered under wisely devised operations and judiciously used, to establish them in homes upon agricultural lands, where they can by proper industry earn self support.

Logging on reservations should only be permitted when the Indians do it themselves, and only for clearing land for cultivation. They may not put their logs on the market to the entire satisfaction of the lumbermen who buy them, but they should be taught this as well as other industries in which they engage for livelihood; and by experience they will soon learn to practice the methods best adapted for producing the largest returns.

In cases of marked business incapacity, the timber might be directed to be sold at auction, a minimum price being fixed, and the proceeds established as a trust fund, or distributed to enable them to cultivate the soil.

THE SOUTH BOUNDARY OF THE WHITE MOUNTAIN INDIAN RESERVATION AND THE COAL-FIELDS THEREON.

The boundaries of the White Mountain Indian Reservation, in the Territory of Arizona, were established and withheld from sale by executive order dated December 14, 1872, and subsequently reduced in area by executive orders dated August 5, 1873, July 21, 1874, and April 27, 1876, January 26, 1877, and March 31, 1877. The last order cited established the boundaries as they now exist. Subsequent to the date of this order Paul Reicker, a deputy United States surveyor, made a survey of the reservation and fixed its boundaries in conformity with that order. In the latter part of February, 1889, Capt. A. E. Miltimore, U. S. Army, in compliance with paragraph 1, Special Orders, No. 18, Department of Arizona, February 16, 1889, made a survey of a portion of the southern boundary of the reservation to determine accurately whether certain coal-fields were within the limits of the reservation, and submitted a report of his work dated March 20, 1889.

From this report it appears that a difference of 3 miles exists between the survey of Captain Miltimore and the one made by Reicker on the southern boundary. Captain Miltimore reports that the greater part

of the coal-fields are within the limits of the reservation as fixed by Reicker's survey, but that some of them are occupied by citizens who claim they made their locations in good faith, believing the lands to be off the reservation.

Captain Miltimore recommended that his report should be referred to the commanding officer at San Carlos, with directions to obtain from the acting Indian agent at that place an expression of opinion as to whether or no that portion of the reservation containing the coal-fields could be relinquished without detriment to the welfare of the Indians.

Capt. John A. Bullis, then acting Indian agent at the San Carlos Indian Agency, on May 1, 1889, reported that in his opinion the lands referred to were not of any service to the Indians and could be relinquished by them without detriment to their welfare.

On May 23, 1889, Quartermaster Kimball, of the U. S. Army, reported that it would evidently be to the interests of the citizens and Indians alike to have the southern boundary of the White Mountain Indian Reservation so thoroughly defined that it could be readily located at all times.

Col. B. H. Grierson, of the Tenth Cavalry, commanding the Department of Arizona, under date of May 25, 1889, referred these reports to the assistant adjutant-general, Division of the Pacific, observing that a number of reductions of the reservations had already been made, and, if continued, it would only be a question of time when the Indians would be deprived of their lands. He also stated that efforts were being made by citizens interested in the coal-fields, referred to herein, to have all the lands south of the Gila cut off from the reservation, and that such a reduction would prove disastrous to the peace and quiet of the Territory; that the Indians then had cultivated farms along the Gila River, to deprive them of which would be great injustice and detrimental to their welfare and to the interests of the Government; that citizens complain when Indians go beyond the limits of the reservation, and every reduction made in its size necessarily confined them to less space, and increased the liability to bring them in contact with those outside.

He further remarked that if the change were made to throw the coal-fields outside the reservation by running an east and west line through the peak of Mount Turnbull, said line should be definitely and plainly marked, so as to prevent the possibility of further encroachments upon the Indian lands, all of which, in his judgment, should be firmly held for the exclusive use of the San Carlos, White Mountain, and other Indians thereon located.

The commanding general, on June 3, 1889, in forwarding the reports to the Adjutant-General, called attention to the report of Captain Bullis, acting Indian agent, and stated that the coal deposits are of no value to the Indians; that if these deposits were worked he had no doubt that a market would be created where the grain of the Indians could be disposed of; that they had now a surplus of grain, and as the citizens

appear to desire to make use of the coal deposits near the southern boundary of the reservation, he deemed it would be advisable to rearrange the southern line in such way as to protect the interests of the Indians and at the same time benefit all concerned.

The Commanding General of the Army, June 18, 1889, submitted these reports to the Secretary of War for the information and action of the Department of the Interior, with the recommendation that the line as run by Deputy United States Surveyor Reicker, under the Executive Order of March 31, 1877, should receive further consideration with reference to its accuracy; and, if it be deemed inaccurate, that another survey should be made under the directions of the Interior Department, with an officer of the Army, if desired, to assist in making the new survey.

The Commissioner of Indian Affairs, to whom the communication of the Secretary of War was referred by the Secretary of the Interior, reported on August 3 that the accuracy of the Reicker survey ought to be speedily determined; and on reference to the Commissioner of the General Land Office it was estimated that it would cost at least \$800 to make this survey, and the Commissioner further reported that the Reicker survey was, as he considered, made as construed by the United States surveyor-general for Arizona and approved by the Land Office, and not as construed by Captain Miltimore.

The segregation of these coal-lands from the reservation has been a question before the Department since 1881. In 1884, under the provisions of July 4, 1884, the Department detailed an employé of the Geological Survey and appointed Mr. M. Bannou to report upon the character of these coal-fields, and their report was transmitted to Congress, as required by the law, in Departmental letter of September 26, 1884. (See S. Ex. Doc. 20, 48th Cong., 2d sess.)

In 1885 and 1886 attention was called to this matter in the annual report of the Commissioner of Indian Affairs.

Surveyor-General Johnson, in his report to the Secretary of the Interior, stated that he had long since been in favor, and was still in favor of running a straight line east and west from Camp Goodwin, which would cut off the coal and not deprive the Indians of anything to which they attach value, unless it was some mescal, but the Gila River for a boundary would possibly be objectionable to the Indians.

In view of the statement of Captain Miltimore, that if his line was found correct it would cut off some little of the coal-fields from the reservation, and inasmuch as the proposed change would put these coal-fields beyond the reservation for the use of the inhabitants of Arizona, it seems scarcely necessary to make a resurvey, at the expense from \$800 to \$1,000, to determine which of these surveys, Reicker's or Miltimore's, is correct, but these facts are here presented that Congress may change the southern boundary if it deems best, so as to segregate the coal-fields from the reservation, *upon such consideration as will secure to the Indians a proper compensation for the lands so taken.*

There is little doubt but that these lands are now sought by particular individuals who urge the change to be made that is here suggested, but there is a public interest to be served by throwing this part of the reservation into the public domain. The public interests will be worked out through the private interests. Scarcely anything indeed can be done or suggested which may not be stopped if suspicion of the gain of the individual take the place of a broad view of the public interests.

If the inhabitants of Arizona need the coal contained in these acres, for which the Indians themselves have no use, and which they will neither work nor lease to others, there should be some steps taken by the Government to have *the Indians compensated to a reasonable degree* and the lands brought into public use, under the laws as established. If an executive order is relied on, it may not secure the Indians the compensation they deserve.

PENSIONS.

ESTIMATES.

The estimates for pensions made for the fiscal year beginning July 1, 1889, were not only inadequate but must have been known to be so when recommended to Congress. The estimate for the previous year was \$80,000,000. But before this estimate for the present year was completed, it was apparent that a deficiency would be incurred, as it was incurred, for the previous year, to the amount of at least \$8,000,000, and that this added to the original eighty millions would not be enough to meet the obligations accruing before the end of even that fiscal year.

It was known also that the pension list was increasing, and if the payments of 1888-'89 could not be met with \$80,000,000, but a deficiency bill had to be passed for \$8,000,000 more, it must have been anticipated that the former Commissioner's successor would be run into a deficiency. Yet the estimate for pensions was confined to eighty million dollars (\$80,000,000) for 1889-'90. The result, if the cause were not so easily detected, might produce an unfair comparison between the previous administration and the present as to the amount to be expended in this branch of the service. I do not hesitate, however, to assume the responsibility, as I have done in the estimates for the next fiscal year, of recommending an increase in the appropriation for pensions, so that a liberal and legal payment may be made to all the deserving pensioners of the Republic. This sum will reach \$97,210,252.

DEPENDENT PENSION.

It is recommended that a pension be granted to every soldier and sailor who did substantial service during the war in the Army or Navy and was honorably discharged therefrom, and who, being dependent on

his daily labor for his support is now, or may hereafter be disabled from procuring his subsistence by such labor. A due regard to its own dignity and character should prevent the Government from allowing any of the men who fought to maintain the Union to suffer from want, when they have become so incapacitated. It is well known to all our people that many who were never disabled in the fight or the service were yet those who met the greatest dangers of the war and who served continuously and faithfully. That Providence saved them from wounds or disease, and that their strong constitutions withstood the hardships of the field, give no reason why they should be left disregarded and unsupported now. The pension is paid by the Government in reward for past services to those who fought to maintain its existence. It has the sanction of the law of self-preservation, which no government in the treatment of its veterans can safely ignore. The preservation of the nation for which these men fought and endured so much to secure, has given to all our people a wonderful degree of prosperity and an almost unlimited ability to pay any obligations honor imposes.

I am not disposed to confer upon all who may ask the money of the people, and would have confined to well-ascertained limits the claims of those who demand a pension. Nevertheless, a disregard of those of the service named whose disability has become since the war so great as to make them dependent would be both unjust to them and unworthy of our country.

You, however, have considered these matters so deeply, both in the halls of legislation and in your present high position, that there would be no need for me to mention them, were it not that, the Pension Bureau being in my Department, any omission of the subject on my part might be misunderstood and misconstrued.

The subject of dependent relatives' pensions is hereinafter mentioned in connection with other recommendations.

RERATINGS.

Soon after the commencement of your administration there sprung up in the Bureau of Pensions practices in regard to the rerating of pensioners that required the intervention of the Secretary. This practice was suggested by the acts of the previous Commissioner. It was found that numbers of those who had been receiving pensions, many of whom were employés in the Pension Bureau, had had their pensions not only increased (some upon application therefor and some without such application), but the increase had been ordered to take effect long anterior to the application; and, on the orders of the Commissioner, large sums of money had been paid to these persons. Many of the cases had also been made "special," that is, preferred in time of hearing, and not a few called "48-hour cases" had been hurried through an examination and the pension increased within two days.

The attention of the Commissioner was called to these cases and dis-

approbation of such allowances expressed; the Commissioner, on the 11th of July, wrote to the Secretary that—

While the Secretary of the Interior has the power to reverse the decision of the Commissioner of Pensions on appeal by a claimant against whom the Commissioner had decided, on the other hand, if for any reason it be held that the claimant has been *granted too much pension*, the Commissioner himself is the only person who has the power to *call a halt* and reduce the pension—

and based this conclusion on section 3, act of June 21, 1879, which reads as follows:

That sections 4771, 4772, and 4773 of the Revised Statutes of the United States providing for biennial examinations of pensioners are hereby repealed: *Provided*, That the Commissioner of Pensions shall have the same power as *heretofore* to order special examinations whenever in his judgment the same may be necessary, and to *increase or reduce* pensions according to right and justice, but in no case shall a pension be withdrawn or reduced except upon notice to the pensioner and a hearing upon sworn testimony, except as to the certificate of the examining surgeons.

To this the Secretary replied July 24, 1889, that the power granted the Commissioner of Pensions by this section is expressly no greater than *heretofore*, and refers only to increase or reduction of pensions according to right and justice, and not to re-rating, which is giving a new and increased rate and ordering it to take effect back, often even to the date of discharge. The effect was, of course, to give the increase thus accumulated through many years to the pensioner in one gross sum at his first payment under his new certificate; this sum amounted, in a great many cases of re-rating, to several thousand dollars, and reached in not a few instances \$5,000 and \$6,000. It was maintained by the Secretary that he had control to correct any abuses in the Bureau of Pensions as in any other Bureau in the Department; and he proceeded to demonstrate the same at length by citation of the acts of Congress and the decisions of the courts.

Attention was also called to section 4698½ of the Revised Statutes, in connection with the section above quoted, and on the same subject-matter, which has not been repealed, and which reads as follows:

Except in cases of *permanent specific disabilities*, no increase of pension shall be allowed to commence *prior* to the date of the examining surgeon's certificate establishing the same, made under the pending claim for increase. * * *

While this section remains, increased pensions can not be ordered at the mere will of the Commissioner; it requires a claim, an examination, and a certificate; such increase is not a matter of sentiment, it is a question of law.

The cases, about which this correspondence occurred as the letter mentioned, were ten in number; but many others were afterwards developed. It appeared in each of the ten cases that the increase was allowed prior to the surgeon's certificate in the pending claim, that in some there was no new examination, and in others not even an application, and that the sums allowed aggregated over \$16,000.

There is a board of appeals established in the Department of the Interior, and the decisions arrived at by the Secretary, through the as-

sistance of this board and the Assistant Secretary, are published at the Government's expense for the direction and guidance of the Pension Office and the information of all parties in interest. These decisions of the Secretary, upon cases of appeal, are the law of the Department until reversed or annulled by some higher authority.

In these decisions it has been announced many times that the Department will uniformly refuse to disturb an adjudication of claim by a former administration, except upon the most conclusive evidence that an error has been committed. When the question as to the propriety of a *given rating* is one of judgment merely, depending upon the weight of evidence, it will not allow the opinion of *to-day to overturn the opinion of yesterday*. But where the incorrectness of the former action is so manifest upon a review of the evidence that *it is not a matter of dispute*, the Department will not refuse to do justice because the error is of long standing and has been sanctioned by subsequent action. And furthermore, it is stated that old cases will not be reopened, reconsidered, nor readjusted except upon presentation of *new and material evidence* tending to show the existence of a palpable *error or a mistake*, and which, therefore, tends to change the real status of the claimant before the Department. Such old cases are clearly within the rule of *res judicata*.

No objection was expressed to an increase of pension, the increase to commence under the pending claim as the law directs, and upon evidence to support it; to be considered *in due course*, and with a proper regard to the right to be heard belonging to the thousands of other claimants for pensions.

The proposition was, *that on the record* as it stood, not as it might be made thereafter or on what might appear from a *further* examination of the men, but upon the record that was acted upon when the pensions were increased and the *sums of money were paid* to these several pensioners, there seemed to have been no sufficient evidence or law for the action.

The purpose was expressed that all these cases should be re-examined; but as those here mentioned were taken up when information was received of them from time to time, nothing having been communicated in regard thereto through ordinary official channels, the Secretary ordered an investigation to be made as to cases passed on both by the last administration and the present one, to obtain information as to what degree "re-ratings" had been illegal or irregular, and whether those during the last quarter had been in accordance with previous practice and precedent. As it was reasonable to suppose other cases of the same general character might be found, and the whole could be better disposed of together, he deferred any further orders until the partial or full report of the board which was organized for the foregoing purpose.

This letter was accompanied by a number of exhibits, and is itself to be found as an exhibit. The board of investigation reported upon

the evils complained of, and its report is published. This board briefly summarized its conclusions, and the same may be found in the report.

The intention is to correct all of these evils for the future under the present Commissioner of Pensions, and so far as the law will allow to exact a return of the money which has been found was illegally paid. This will prove a tedious and somewhat difficult undertaking. But in view of the enormous sums of money that might have been expended had not this evil been corrected at the time it was, the Government may be well satisfied, I think, even if it should have to lose a large portion of that already paid out.

The Secretary has no doubt but that the Pension Bureau can be administered with as great regularity and upon as fixed lines of practice and clear principles of law as any other bureau under the Government. He is also convinced that the soldiers of the late war are not disposed to have it administered otherwise; that they will be content if their claims may be speedily heard, and each in his turn, without favoritism or partiality to any degree, receive the amount that is due him in the opinion of those to whom the law submits the claim. Upon this basis they will receive liberally under the laws, and on this basis the people of this country, who have ever shown a disposition not only to favor, but to highly honor the soldiers who preserved the Republic, will be entirely satisfied with any reward that may be bestowed upon them. And while it may be much regretted that any irregularities should have crept into the service under the circumstances mentioned, it is fortunate that at this time well-defined lines of procedure and fixed principles for administration of pensions should have been brought under consideration. It will, no doubt, lead to their perfection in practice, as it has already to their great improvement.

BUSINESS OF LAST YEAR.

The report of the Commissioner for the last fiscal year shows that there were on the rolls on the 30th of June, 1889, 489,725 pensioners, classified as follows: 351,484 Army invalids; 97,590 Army widows, minor children, and dependent relatives; 4,547 Navy invalids; 2,266 Navy widows, minor children, and dependent relatives; 603 survivors of the war of 1812; 9,964 widows of those who served in that war; 17,065 survivors of the war with Mexico, and 6,206 widows of those who served in that war. The names of 51,921 pensioners were added to the roll and the names of 1,754 pensioners dropped from the roll were restored, making an aggregate of 53,675 pensioners added to the roll during the year. The names of 16,507 pensioners were dropped for various causes, leaving the net increase for the year 37,168.

The average annual value of each pension at the close of the year was \$131.18, an increase for the year of \$5.78 in the average amount of each pension. The aggregate annual value of all pensions at the close of the year was \$64,246,552.36, an increase for the year of \$7,539,331.44.

The amount paid for pensions during the year was \$88,275,113.28, an increase of \$9,499,251.36 over the amount paid in the previous year. The total amount disbursed by the agents for all purposes was \$89,131,968.44. At the close of the fiscal year there was due to pensioners as first payments of pension on certificates which had been issued the sum of \$5,565,270.31.

The whole number of claims presented during the year was 244,240, of which 81,220 were for original pension, and 163,020 for increase of pension. The number of claims for original pension allowed was 51,921; the number rejected was 19,147. The number of claims for increase allowed was 123,001; the number rejected was 56,679.

The Commissioner makes several recommendations as to amendments of the law and additional legislation.

RECOMMENDATIONS.

An act approved March 3, 1877, directs that "the law prohibiting payment of any money on account of pension to any person, or to the widow, children, or heirs of any deceased person who in any manner engaged in or aided or abetted the late rebellion against the authority of the United States, shall not be construed to apply to such persons as afterwards voluntarily enlisted in the Army of the United States, and who while in such service incurred disability from wound or injury received or disease contracted in the line of duty." This law makes no provision for those who under like circumstances enlisted in the Navy. I concur in the recommendation that it be amended so as to make such provision.

The law granting pension to a mother or father on account of the death of a son requires that, to give title, the condition of dependence should have existed at the date of the son's death, and have been recognized by him. If, since the son's death, the parents have fallen into a condition in which they require aid in providing a support for themselves, the law, as it now exists, affords them no relief. The Committees on Pensions of the Senate and House of Representatives have established a rule under which cases in which a condition of dependence exists at the time of application to Congress are recommended for relief by special act, and Congress has acted in accordance with the recommendation of the committee. Justice would be better attained by the passage of a general law extending to such cases than by singling out for special acts such cases as are presented to Congress, and providing that for such claims it shall be sufficient to prove that the parent is without other present means of support than his or her own manual labor, or the contributions of others not legally bound for their support.

The act to increase certain pensions approved June 16, 1880, provides that all soldiers and sailors who *were then receiving* a pension of \$50

per month under the provisions of the act of June 18, 1874, should have the same increased to \$72 per month from June 17, 1878. The language of this act made it applicable only to those who, on the 16th of June, 1880, were entitled to the benefits of the act of June 18, 1874. The act made no provision for the cases of persons who, by the increase of their disabilities, should, after June 16, 1880, become so disabled as to be entitled to the benefits of the act of June 18, 1874. The result of this is that those who, since June 16, 1880, have become so disabled as to require the aid and attendance of a second person because of total and permanent helplessness receive a pension of \$50 per month, while those who on the 16th of June, 1880, were receiving a pension for disability of this degree are now on the roll at the rate of \$72 per month. It was probably not the intention of the law to make such a discrimination between pensioners disabled to the same extent, but the language of the law is so clear and explicit that it can not be extended to others than those who at the date of its passage were receiving a pension of \$50 per month under the act of June 18, 1874. The mere statement of these facts is sufficient to indicate that there should be a remedy by amendment of the law.

The amount granted to a widow on account of each child of the soldier should be increased, and the pensions of minor children in their own right also.

I concur in the recommendation of the Commissioner that the act of August 7, 1882, amending section 7402 of the Revised Statutes, be so amended that when a widow is deprived of pension thereunder, the title to such pension shall without further proceedings vest in any minor child or children of the soldier.

There are certain inequalities in the rates of pension which are sources of dissatisfaction among pensioners and which can only be remedied by legislation.

The act of August 4, 1886, provides a pension of \$30 per month for the loss of a hand or foot. Under the proviso to the same act the pension for a disability one-half that produced by the loss of a hand or foot is \$9 per month. For a disability equivalent to the loss of a hand or foot, the pension for the period since March 3, 1883, is \$24 per month. A disability not equivalent to the loss of a hand or foot is pensioned at such proportional part per month of \$18 as the disability bears to that which would be caused by the loss of a hand or foot. It is desirable that there should be in all cases a fair proportion between the pension and the extent of the disability.

PENSION APPEALS.

Under the supervisory power conferred upon the Secretary by section 441 of the Revised Statutes, appeals are filed by claimants or taken by the United States to the Secretary of the Interior in regard to pensions and bounty-land claims passed on by the Commissioner of Pensions.

The supervisory control thus conferred upon the Secretary insures to the claimants an opportunity to have the grounds upon which their claims may have been rejected by the Bureau of Pensions reconsidered, and also insures correction of any errors of law and fact that may appear in the action of the Commissioner, either for or against the Government. The Secretary is aided in this work largely by the Assistant Secretary. Until the recent action by the Secretary in regard to the re-rated cases in the Bureau of Pensions these appeals had been confined to claimants who asserted that they had not received as much pension as the law required, but it is deemed that appeal may be had to the Secretary on behalf of the Government where it is believed that the pensioner has received an amount in excess of that permitted by law.

As shown by the Assistant Secretary in his report filed herewith, the process of investigation to which pension appeals are subjected is distinct from the method which is applied to the original examination of claims in the Bureau of Pensions; and yet the two are related, inasmuch as the adjudication of each appeal is based upon the Commissioner's adverse decision of the claim, the record, and all the accompanying papers. The investigation is conducted with reference not only to the facts which the evidence may establish, but largely with regard to the construction of the law and to the citation of departmental precedents that should determine the claimant's rights.

This board of review was made by the order of the Secretary July 1, 1884. Its further organization and vicissitudes are pointed out in the report of the Assistant Secretary, in which will be found a summary of the work for the fiscal year of 1888-'89.

A number of important rulings have been made by this board with a view to broaden and liberalize departmental interpretations of the law applicable to numerous meritorious claims where applications for pension had been unjustly denied, particularly because of barren technicalities and partly by reason of a narrow definition of pensionable rights; and, as the Assistant Secretary further recites, this endeavor to liberalize the practice of the Department so as to afford each soldier the fullest opportunity to establish his claim has been pursued with a strict observance of the spirit and intent of the law, maintaining always the integrity of the statute, while giving the claimant the benefit of every reasonable doubt.

DECISION ON PENSION TO DISHONORABLY-DISCHARGED SOLDIER.

Much criticism was brought upon the board, and the Assistant Secretary, acting under orders of the Secretary, because of the decision rendered in the case of Daniel B. Kaufman, late captain Company A, Forty-eighth Regiment Pennsylvania Volunteers, wherein the only question to be determined was whether or not a dishonorable discharge from the service involved a forfeiture of either title or claim to pension for disabilities incurred in the line of duty. This question was considered only,

as it necessarily had to be, in its legal aspects, and was decided after a thorough examination of the statutes, as well as of the established precedents of the Department.

The impartial examination thus made led to the conclusions as follows:

(1) Invalid pensions are granted for causes of *disability* due exclusively to line of duty in the service.

(2) A discharge from the service is a prerequisite to pension, but the *nature* or *character* of the discharge itself does not impair nor otherwise affect the claim for pension on account of disabilities due to the service.

(3) A "dishonorable" discharge is a *penalty* imposed by competent authority for an *offense* against the regulations of the service, but has no relation to the claim or title to *pension* for alleged disabilities; and when said penalty is inflicted, the power of the Government to punish for the alleged offense is exhausted.

(4) A "dishonorable" discharge does not involve the *forfeiture* of a soldier's pensionable rights, *there being no law whereby such forfeiture can be enforced*, and the Department possesses no power to inflict such a penalty outside of the statute; and, as the Assistant Secretary proceeds to state, in pursuance of these conclusions the order No. 135, which had been issued by the Commissioner of Pensions September 4, 1885, overruling all previous practice of the Bureau of Pensions and subverting the long-established decisions of the Secretary of the Interior and of the Judge-Advocate-General of the Army, was rescinded, the claim of Kaufman allowed, and the former practice of the Department re-affirmed.

The decision was but a re-assertion of the doctrine which was explicitly announced in the case of Mary Jane Conroy, the dependent mother of James B. Conroy, which was adjudicated June 9, 1875, by the Secretary of the Interior, who then declared that no act of Congress, nor any act either amendatory of or supplementary thereto "contains any provision whatever by which a pension is denied to a disabled soldier of the war of 1861 because he was dishonorably discharged." And the Secretary added particularly that "the allowance and payment of pension to such a soldier is conditioned alone upon proof of disability incurred in the service and line of duty."

This was in harmony also with a decision involving the same question rendered by Hon. Joseph Holt, Judge-Advocate of the Army. That able jurist therein stated that—

The pension is granted on account of disability incurred by the party in the line of duty while in the military service, wholly irrespective of the circumstances, whether honorable or dishonorable, under which he may subsequently have become separated from the army.

SECRETARY RECOMMENDS A CHANGE OF THE LAW.

This is the state of the law unquestionably, and must be conformed to until Congress shall in its wisdom otherwise direct. But the Secretary thinks the pension roll surely should be one where no deserter of his

country's flag, nor any man who was dishonorably discharged from the Army, should appear. As to the deserter, no argument is required. He is never allowed a pension, because he is still, so far as the law is concerned, in the service of the United States. He has never been discharged, and consequently can not obtain a pension. But while there may be cases where a dishonorably discharged soldier is yet worthy of consideration for what he may have done before this disgrace fell upon him (as, for instance, where he may have been seriously injured in some battle and yet subsequently discharged for an offense against the Articles of War, perpetrated in a moment of passion or of weakness), nevertheless the same principles of discipline and of honor that ought to have prevented him from disgracing himself at all should affix to him the penalty of forfeiting whatever he may have previously deserved because of his good service. Thus his comrades, who had undergone every danger and resisted every temptation through a high regard for their country's laws and their own personal integrity, are kept free from an association that otherwise erases the distinction between the good and the dishonorable. This may be a personal sentiment, but it is believed to be the feeling of most of the soldiers of the country who served in the war, and a sentiment generally prevalent among our people. It is to be remembered at all times that if there are any cases that in the light of subsequent events appear to be deserving of special relief and exceptions to the general rule, the power rests with Congress to grant the pension by a special act. It is endeavored in this report to state only what should be, in the opinion of the Secretary, the general rule.

It is now too late, possibly, to reach many of the cases by an act of Congress; but nevertheless I recommend that a distinct act be passed affecting all cases not yet adjudicated, prohibiting a pension to any one dishonorably discharged from the service of the United States.

REVISION AS TO SPECIFIC DISABILITIES.

I join in the recommendation of the Assistant Secretary, for the reasons pointed out in his report, that there should be a careful revision of the statutes relating to the classification and rating of specific disabilities; also of those concerning the conditions which constitute dependent cases, and the regulations governing accrued pensions, as well as to the line of duty in the service that might remove the misapprehensions of many claimants as to their pensionable rights, and facilitate the adjudication of such claims when appealed from the Commissioner of Pensions.

CASES NOT TO BE MADE SPECIAL.

I further recommend that it should be made the law of the land that no cases can be made special or taken up for consideration out of their order in any of the bureaus of the Government, except upon a state-

ment of facts clearly distinguishing them from others equally meritorious; and that in the Pension Bureau no case should be taken out of its order, except where there is utter destitution or the prospect of early death, a fact which should be clearly established by sufficient testimony of record; and that some suitable penalty should be attached to both the application and the granting of the application where unauthorized by one of these causes. It is in violation of the plainest principle of justice, where so many applicants are abiding their time, patiently waiting for the action of the Pension Bureau, that any one should be allowed through any influence whatever to take undue precedence of his comrades or of his comrades' relatives, and have a claim given to him while they must await, not only their turn, but have that turn delayed by the very preference granted.

BUREAU OF RAILROADS.

ITS PURPOSE.

The Commissioner of Railroads was originally styled the "Auditor of Railroad Accounts," and the office was created by an act entitled "An act to create an Auditor of Railroad Accounts, and for other purposes," approved June 19, 1878.

By this act it was made his duty, under and subject to the direction of the Secretary of the Interior, to—

Prescribe a system of reports to be rendered to him by the railroad companies whose roads are in whole or in part west, north, or south of the Missouri River, and to which the United States have granted any loan of credit or subsidy in bonds or lands, to examine the books and accounts of each of said railroad companies once in each fiscal year, and at such other times as may be deemed by him necessary to determine the correctness of any report received from them; to assist the Government directors of any of said railroad companies in all matters which come under cognizance whenever they may officially request such assistance; to see that the laws relating to said companies are enforced; to furnish such information to the several departments of the Government in regard to tariffs for freight and passengers, and in regard to the accounts of said railroad companies as may be by them required, or in the absence of any request therefor, as he may deem expedient for the interest of the Government, and to make an annual report to the Secretary of the Interior on the 1st day of November, on the condition of each of said railroad companies, their road, accounts, and affairs, for the fiscal year ending June 30, immediately preceding. (20 Stats., p. 169.)

Commissioner Taylor has made his report under these and other provisions of said act as therein required. The office is completely organized and has performed its functions satisfactorily.

REPORTS DEMANDED OF ROADS RECEIVING UNITED STATES LANDS THROUGH STATE GRANTS.

It appears from the report, as the Secretary was orally advised before it was submitted, that several railroad companies which had received grants of public lands to aid in the construction of their roads

declined to report to the Commissioner for the reason that such grants were made by the respective States in which the roads are located, and not by the United States, and claimed that therefore they do not come within the language of the act of Congress creating the office of this Commissioner and defining its powers, the point being made that a grant to a State for a railroad is not a grant to the railroad company.

Upon the presentation of this question it was submitted to the Assistant Attorney-General assigned to this Department, and after argument he has rendered his opinion to the effect that the grant was made for the purpose of aiding in the construction of railroads between certain points and the benefit of the grant was conferred by the States upon certain corporations created by them to carry out the purposes of Congress. The States are mere trustees, while the roads upon whom the grants have been conferred are the real beneficiaries *contemplated by the act*; and are amenable to the requirements of the provisions of said act. The Secretary has approved this as the law applicable to these cases, and the Commissioner will be instructed to require these subsidized companies to make report and come under the regulations of the office the same as those roads that have received their land directly from the United States.

No doubt upon a proper demand from the Commissioner, supported by the opinion quoted, and Department instructions, these railroad companies will obey the law and acknowledge their obligations for the assistance that has been bestowed upon them by the Government.

DEBTS DUE FROM SUBSIDIZED PACIFIC RAILROAD COMPANIES.

Another question of great importance, which it is necessary for the Fifty-first Congress to take up, and which I recommend to your earnest consideration, is that in regard to the debt rapidly maturing in favor of the United States against those Pacific Railways that received aid from the Government.

On March 7, 1888, in the House of Representatives, and on July 31 of the same year, in the Senate, separate reports were made upon this subject by select committees. I invite your attention to them for an extended statement of the legislative history of the relations between the Government and these railways, and an expression of views as to what policy should be pursued in regard thereto.

The original acts of Congress under which the subsidy bonds were issued to the Pacific railways (act of July 1, 1862, secs. 5, 6, U. S. Stat., vol. 12, pp. 492, 493; act of July 1, 1864, sec. 10, U. S. Stat., vol. 13, p. 360), made the grant expressly "upon condition that said company shall pay said bonds at maturity," and required no payment before that time, except such as should be made by the application of one-half of the compensation for services rendered to the Government by the companies, and the annual payment of 5 per cent. of the net earnings of the roads.

For reasons not necessary to give here, the plan of the original acts failed and Congress took no further action of importance until 1873, when suit was brought because of the transactions of the Credit Mobilier, according to the act of March 3, 1873 (U. S. Stat. (?), vol. 17, p. 509). These proceedings, however, came to naught because of the opinion of the Supreme Court that the United States had no standing in court, expressed in the case of the United States *v.* Union Pacific Railroad Company (98 U. S., 569). On May 8, 1878, the Thurman act (U. S. Stat., vol. 20, p. 56) was adopted, which was intended to insure the payment of the subsidy debt by requiring the companies to pay into the Treasury of the United States 25 per cent. of their net earnings in every year. This act did not apply to the Kansas Pacific, Central Branch Union Pacific, or Sioux City and Pacific Companies.

The rise in the price of the United States bonds, in which the sinking fund above provided for could alone be invested, and the reduction in the rate of interest which followed the refunding measures of 1879, caused the Commissioner to state in his report of 1882 that the funds had evidently not accomplished the result anticipated, and since April, 1881, might be regarded as having practically failed for want of suitable investment. He therefore urged the advisability of entirely abandoning the method adopted by the Thurman act, and substituting a system of payments by semi-annual installments, recommending legislation which should enable the country to give interest-bearing bonds for the amount found due July 1, 1883, one bond maturing at the end of each six months; and these recommendations were renewed in 1883 and 1884. Bills were introduced in the Forty-eighth and Forty-ninth Congresses, endeavoring to accomplish the purpose in view. Finally the Senate committee in the Fiftieth Congress, after making its statement to the effect before mentioned, said :

The committee, in the course of their investigations, early became satisfied that the financial ability of the different Pacific railroad companies and their attitude towards the Government were so entirely different that no plan of settlement could properly be made applicable to all, and in this report they deal only with the Union Pacific Railway and the Central Branch Union Pacific, who are better able and more willing than the other companies to make an immediate adjustment of their indebtedness.

It then went on to show the debts of the Union Pacific Railway Company and the Central Branch Union Pacific Company, with the amounts paid by each, exclusive of the sums in the sinking fund, and that the provision made by existing law for the extinguishment of the debt is entirely inadequate, and that on July 1, 1897, which is the *average date* of maturity of the subsidy bonds, the United States will hold a claim against these corporations which it will be utterly impossible for the companies to pay.

The following table exhibits the condition of this debt on June 30, 1889, as shown in the report of the Commissioner of Railroads for the present year:

Amount of bonds issued in aid of Pacific railroads, the interest paid thereon by the United States, and the amount repaid by the several companies to June 30, 1889.

	Union Pacific, including Kansas Pa- cific.	Central Pa- cific, includ- ing Western Pacific.	Sioux City and Pacific.	Central Branch Union Pa- cific.	Total.
Principal of bonds issued by the United States	\$33,539,512.00	\$27,855,680.00	\$1,628,320.00	\$1,600,000.00	\$64,623,512.00
Interest paid thereon by the United States	43,161,407.82	35,148,849.01	2,050,492.69	2,125,808.26	82,486,557.78
Total debt	76,700,919.82	63,004,529.01	3,678,812.69	3,725,808.26	147,110,069.78
CREDITS.					
<i>Applied to bond and interest account.</i>					
Transportation	15,693,865.43	5,873,758.45	153,509.69	384,118.97	22,105,252.54
Cash	438,409.58	658,283.26		6,926.91	1,103,619.75
<i>Applied to sinking-fund ac- count.</i>					
Transportation	6,660,564.41	2,924,073.36			9,584,637.77
Cash	1,421,714.46	633,992.48			2,055,706.94
Interest on sinking-fund in- vestments	1,216,573.48	657,686.72			1,874,260.20
Total credits	25,431,127.36	10,747,794.27	153,509.69	391,045.88	36,723,477.20
Balance of debt	51,269,792.46	52,256,734.74	3,525,303.00	3,334,762.38	110,386,592.58
Excess of interest paid by the United States over all credits	17,730,280.46	24,401,054.74	1,896,983.00	1,734,762.38	45,763,080.58

The subject can better be illustrated and more easily understood in its other features if we confine ourselves to the consideration of the Union Pacific Railway, which, as already mentioned, is willing and able to make an adjustment of its indebtedness. I quote from the Commissioner's report:

UNION PACIFIC RAILROAD COMPANY.

The Union Pacific Railway Company was formed January 24, 1880, by the consolidation of the Union Pacific Railroad, the Kansas Pacific Railway, and the Denver Pacific Railway and Telegraph Company, and embraces 1,821.43 miles of road. It also controls and operates nineteen branch lines, 3,131.50 miles in length, making an aggregate of 4,952.93 miles in the system. The main line, from Omaha, Nebr., to Ogden, Utah, and a portion of the Kansas division, from Kansas City to the three hundred and ninety-fourth mile-post, were aided by the United States with bonds and lands, and are subject to the requirements of law with respect to paying annually a percentage of net earnings to the Government.

The subsidy bonds issued to this company to aid in its construction amount to \$33,539,512, the Union Division having received \$27,236,512, and the Kansas Division

\$6,303,000. The United States had paid in interest thereon \$43,161,407.82. There had been repaid by the company, in transportation services and cash payments, as shown by the books of the Treasury Department, the sum of \$25,431,127.36, which made its liability to the Government June 30, 1889, amount to \$51,269,792.46. The excess of interest paid by the United States over all credits amounted to \$17,730,280.44.

During the year 6,741 tons of steel rails were laid, at a cost of \$213,328.76, and 728,559 cross-ties were laid, at a cost of \$416,668.61. There were consumed 650,542 tons of coal, at an average cost of \$1.78 per ton, and 9,248.75 cords of wood, at an average cost of \$2.25 per cord.

The ballast consists of 22.89 miles of stone, 18 miles of gravel, 4.86 miles of burnt clay, 28.29 of cinders, and the remainder of earth.

The rolling stock consists of 487 locomotives, 443 of which are equipped with Westinghouse automatic brakes; a three-fourths interest in 66 Pullman cars; 164 passenger cars, 74 emigrant, 99 baggage, mail, and express, and 12 officers' cars, making a total of 415 cars in the passenger department, all of which are equipped with Westinghouse brakes and Miller platforms. There are 5,673 box, 1,076 stock, 1,929 coal, 488 flat, 132 combination stock, 427 refrigerator, 25 fruit, 700 furniture, and 204 caboose cars, making a total of 10,654 cars in the freight department, 8,517 of which have Westinghouse automatic brakes. There are 231 cars used in road repair service. The equipment owned by the American Loan and Trust Company of Boston is included in the above.

On June 30 1889, the company had disposed of 13,130,414.65 acres of land, the total cash receipts from all sales amounting to \$31,325,294.90. There remained outstanding on account of time sales the sum of \$11,661,676.14. The average price per acre from all sales was \$2.54 for the Union Division, \$3.78 for the Kansas Division, and \$4.26 for the Denver Division.

In order to provide for the more economical management of several of the principal branch lines in which the Union Pacific Railway Company has a controlling interest, the Oregon Short Line Railway, the Utah and Northern Railway, the Utah Central Railway, the Salt Lake and Western Railway, the Utah and Nevada Railway, the Ogden and Syracuse Railway, the Idaho Central Railway, and the Nevada Pacific Railway Companies entered into an agreement July 27, 1889, to form and consolidate their respective organizations, capital stock, railroads, property, and franchises of every nature and description into one company, which shall continue in existence for a period of fifty years, unless sooner disincorporated, and which shall be called and known by the corporate name of the "Oregon Short Line and Utah Northern Railway Company." This agreement of consolidation has been duly ratified by a vote of more than two-thirds of the entire capital stock of each company.

The railroad and its appurtenances were carefully inspected by the engineer in August last, and found to have been maintained in its usual excellent condition. The details of all improvements made during the year will be found in his report herewith.

The Government holds as security for this debt a second lien on the whole line of the railroad and telegraph, together with the rolling stock, fixtures, and property of every kind and description, in consideration of which the subsidy bonds were issued.

The act of July 1, 1862 (Sec. 5, U. S. Stat., vol. 2, 492), act of July 2, 1864 (Sec. 10, U. S. Stat., vol. 13, p. 360), by a decision of the Supreme Court of the United States in the case of *United States v. Kansas Pacific Railway Company* (99 U. S., 455), and *United States v. Denver Pacific Railway Company* (99 U. S., 460), give the United States no lien on the unsubsidized portion of the road.

It is held by some, although it is denied by the Commissioner in his report, that this Government lien does not include the branch lines nor the valuable terminals at Omaha, Ogden, Kansas City, and elsewhere; in a word, that the subsidized part of the Union Pacific Railroad proper begins west of the terminal at Omaha and ends at Ogden, and the Kansas Pacific begins west of the terminals at Kansas City and ends in a prairie 394 miles west.

Upon all that portion covered by the Government lien there is a prior mortgage for an amount equal to the principal of the bonds issued, according to section 5, act of 1862, which first mortgage becomes due at the same time as the Government claim matures.

It is apparent that any enforcement of this debt would result in the sale of the road, and at that sale either the United States would have to be the bidder or it would be bid in by the company itself, because of the immense amount of the debt and the fact that the lien is but upon a portion of the road and upon that there is a prior mortgage. If the bid by the railroad company itself, or even another, were paid in new bonds, that itself would be but an extension of the debt.

As stated by the Senate committee above mentioned, the United States is a creditor, having a large debt which will not mature for nine years (now eight), and which is very inadequately secured. It is clear that the *debtor* can not pay when the debt becomes due, and that the only possible way in which it can pay is by installments.

THE BILL FOR SETTLEMENT THAT WAS PROPOSED.

A bill was prepared and presented to the Fiftieth Congress by the several committees named. It fixes the amount of money which, if put at interest on July 1, 1888, at 3 per cent. per annum simple interest, would equal the entire sum due from the corporations when the debt matures, after making proper allowances for the payments already made. It takes the sinking fund in part payment of this sum and makes the companies give their bonds for the balance, bearing interest at the rate of 3 per cent., payable semi-annually, and requires them to pay a portion of these bonds every six months, so that at *the end of fifty years* the entire debt will be paid. It requires the companies to give a mortgage upon all their property of every kind to secure these bonds and makes proper provision for foreclosure, while it permits the companies to take up and pay the whole or any part of the bonds at any time if their financial condition makes it possible for them to do so.

The Senate committee set forth in an appendix in what the security consisted, with values, and pointed out the advantages supposed to be obtained by the bill.

The bill was Senate No. 3401, Report No. 1950, Fiftieth Congress, second session, Calendar No. 2000.

On the 28th of October I received from the present Government

directors of the Union Pacific Railway Company their report to the effect that—

In their judgment the interests of the United States demand early action by Congress to secure the payment by the company of its indebtedness to the Government; that this matter has been under consideration for a great many years, and since 1884 has been the subject of constant investigation and discussion. They state that the general plan of settlement first suggested by the Commissioner of Railroads has been considered by committees of both houses of Congress, by successive Boards of Government Directors, by the Pacific Railroad Commission, and by the Treasury and Interior Departments, and while it has been changed in details to meet objections which have been suggested, its leading principles have never been successfully attacked. We have ourselves examined the plan in all its essential details, and entirely approve it. We cordially concur in the recommendations made in the last report of our predecessors upon this Board, and desire only to express our firm conviction that the interests of the United States demand the passage of a bill substantially like that pending when the last Congress adjourned.

This report was signed by Messrs. George E. Leighton, John F. Plummer, Jesse Spalding, Rufus B. Bullock, and James W. Savage. The report referred to by these gentlemen, being that of the previous board of Government Directors, was very emphatic in support of the proposed bill, and is so familiar that it is deemed necessary to do no more than refer to it here.

COMMISSIONER'S VIEW ADVERSE TO BILL.

The present Commissioner of Railroads does not coincide with these views entirely, and in his report he says:

It is very clear to my judgment that there should be an extension of time and a reduction in the rate of interest. *I am not thoroughly convinced that the end sought can be best attained by the passage of a funding bill providing for regular fixed payments.* Successive crop failure or years of business depression might render the companies unable to meet their obligations. Such legislation should be enacted as will best enable the companies to eventually discharge their indebtedness to the Government. It would be unfortunate, indeed, to both the railroad companies and the Government should Congress impose such arbitrary conditions in regard to fixed payments as might render compliance on the part of the companies practically impossible. Such unwise legislation might make it necessary for the Government to pay off all liens prior to its own and take possession of the roads—a condition of things that it is certainly desirable to avoid.

The Commissioner concludes as follows:

It is my opinion that it would be wise to pass an act giving a reasonable extension of time, reducing the rate of interest to 3 or 4 per cent., requiring that the earnings from all Government transportation by the subsidized companies on all lines operated by them, whether aided or non-aided, should be applied to the payment of any interest or principal due or to become due within the fiscal year in which the services might be rendered; prohibiting the payments of any dividends by either of the subsidized companies, unless such company shall have paid all interest on its bonded debt having a lien prior to that of the Government and interest then due and payable on its debt to the United States; and exacting the payment of such a percentage of the *gross earnings* of the subsidized lines as, by careful estimates, would realize sums sufficient to pay accruing interest and raise a sinking fund that would meet

the principal of the debts at their maturity. The said companies should also be permitted to refund their first-mortgage bonds under such provisions as would prevent any *increase in the debt* which is allowed priority over the debt to the United States.

It is not deemed necessary to do more than thus present the varied views of railroad men connected with this subject.

The matter has been so fully discussed by Congress that it is thought it may be well left to its further consideration without particular direction, and that no recommendation is necessary further than that it should receive early and earnest attention, as one of the most important financial subjects to be dealt with. The general purpose undoubtedly now is, as it was in the beginning, to foster and maintain these great highways across the continent, and if this may be accomplished by a reasonable extension of the debt, with security at least as good as that now held, it will be better than to attempt to enforce obligations at maturity, which it is evident the debtors can not pay, and by which course the Government will have to not only purchase the road, but assume the prior indebtedness to save it after it has been obtained. The particulars of settlement may be wisely left to Congress.

The Commissioner gives a very extended and accurate account in comparative tables of the condition of the several railroad companies indebted to the Government for bonds issued in aid of their construction. The condition of the roads which have received land grants only and which come under the jurisdiction of the Department, but in which the Government has no direct pecuniary interest, will appear also in detail in the report.

The Bureau of the Commissioner of Railroads has been somewhat relieved of its burdens by the interstate-commerce law; but still the office is a very important one, not only for the information and protection of the Government interests, but for a wide field of usefulness in advising the Government upon the several topics committed to the attention of the Commissioner by the act creating his office.

ACCOUNTS AND SETTLEMENTS TO BE TRANSMITTED TO BUREAU OF RAILROADS.

The Commissioner's recommendation is approved, that the act of Congress creating this Bureau should be amended, by providing that the bonded and subsidized roads should transmit all accounts for transportation services rendered to the Government, including carrying the mails, through his office to the proper accounting officers of the Treasury, and that all disallowances or differences in said accounts found by the accounting officers upon settlement be reported to this office before final payment or allowance of the same; and that this office report to the Treasury Department what changes, if any, are required in the payment or disposal of the moneys so found to be due the companies

There are now millions of dollars of unsettled bills awaiting final action in the Treasury Department. It is to the interest of the Government to know the exact condition of its accounts with the railroad companies it has aided, and whose obligations it holds; and it is greatly to the interest of the railroad companies that any counter claims they may have should be known to the Commissioner, that he may always, on these reports or other statements, give them a fair credit. For instance, there has arisen a difference between the statement of the account against the Union Pacific made by the Commissioner, and that claimed to be correct by the company. So far as the books of the Commissioner's office show the company is in default, while the company asserts that, if claims by it filed in the Treasury Department are taken into consideration, nothing would be due the Government. It is but just to say that the claims of the company may be entirely correct, and yet the Commissioner be compelled to state the account against it, because the matters known to the Treasury Department are not required to be reported to the Commissioner, and he proceeds on the only official knowledge he has.

This condition of the accounts can be soon remedied by the means herein pointed out.

As accounts are rendered at present, it would be a vexatious and almost impossible task to secure such information. It could readily be arranged so that the records of the Railroad Bureau in this Department would at all times give easy access to any information that might be desirable by Congress, or any of the Departments of the Government, in regard to the accounts and indebtedness of the bonded roads. This matter is further discussed in the report and extended comment upon it here is not necessary.

BUREAU OF EDUCATION.

The Commissioner of Education details at length the peculiar labors of his Bureau; the facilities it affords for a knowledge of annual statistics of the school systems of the country, and instruction in the methods and practices of a higher education and co-ordination of different scholastic agencies. It appears from the statistics of the public schools for the decade 1876-'77 to 1886-'87 that the growth of the system, considering the whole country, outstripped the growth of population. The excess of this increase of enrollment over the increase in population six to fourteen years of age was 2.1 per cent., and was due to the progress of the public schools, particularly in the South Central Division. The increase there of enrollment (83.4 per cent.) shows an increase over the increase of population (36.8 per cent.) of 46.6 per cent.

Commissioner Dawson states that the colored children are apportioned an equal share of the school fund in the Southern States, unless in the case of Delaware, and their schools are kept open as long and

under as well-paid teachers as those of the white children. The funds for the support of those schools, he states, are furnished mainly by the white inhabitants; but due allowance should be made for all the sums that have been furnished for the education of the negroes from private sources and benevolence and through taxes raised among themselves. The subject is treated at some length, which I will not quote further, but the report is certainly worthy of consideration as a statement made by one who should be familiar both with the facts as to the education of the colored people of the South in the public schools and the sentiments of the white population there towards them.

The statistics show that about 64 per cent. of the white population of school age in the Southern States is enrolled, while the enrollment of the colored population is only about 53 per cent. In the District of Columbia there is a colored enrollment which, considered in relation to the colored population of school age, exceeds the enrollment of the white population of school age. In North Carolina the white and colored populations have the same proportions of enrollment.

Among many other interesting facts given in the Commissioner's report I note the following:

According to the statistics for 1888, the attendance in the collegiate departments of colleges and scientific schools, including colleges and seminaries for women, is equivalent to 1 for every 597 of the population; or, excluding the seminaries for women, 1 college student for every 672 of the population. If professional schools be included in the latter estimate, the proportion of students to population becomes 1 to 506. This proportion gives us a high standing among enlightened nations with respect to the use of the means of culture as will appear from the consideration of corresponding estimates for certain foreign countries.

In a recent speech in the House of Commons, Sir Lyon Playfair stated that the teaching universities of England had 1 student to 3,500 of the population; Ireland, 1 student to 2,040 of the population; while Scotland had 1 university student to 580 of the population. According to the statistics for 1888 the students in the Prussian universities were equivalent to 1 for ever 1,942 of the population, and in the universities, gymnasia, progymnasia, and real schools combined, 1 student for every 171 of the inhabitants. These figures can not be made the basis of exact comparison on account of the great difference between the scholastic systems of the different countries, but they do show plainly the comparative position of the several countries with respect to the use of the highest institutions of learning which they severally maintain.

EDUCATION IN ALASKA.

The education in the Territory of Alaska is intrusted to the supervision of the Commissioner of Education, who has also the management of the finances of the Government schools in that land. He has the assistance of the general agent of education, and the Territorial board of education, which is appointed by the Secretary of the Interior upon nomination by the Commissioner. The former board of three was increased during the past year by the addition of the United States commissioner at Juneau, and Mr. William Duncan, the superintendent of the school and colony at Metlakatla, on Annette Island. Thirteen

teachers of day schools have been employed and located one each at Howkan, Klawack, Fort Wrangell, Haines, Killisnoo, Kodiak, Afognak, Unga, and Douglas, and two each at Sitka and Juneau.

The Bureau has aided several mission schools at different points in the Territory, and the industrial boarding-school of the Presbyterian Home Missionary Association at Sitka.

The difficulties surrounding the education of the Indians in Alaska are even greater than those connected with the Indians who are under the supervision of the Indian Bureau. The great distance from the seat of Government, and the difficulty of communication between one part of the country and the other, and with the Islands, which compose a large part of the Territory, upon which many of the Indians reside, cause much trouble, to say nothing of the climate and the long seasons of winter and darkness that rest upon that portion of our Republic. A Commission has visited Alaska during the past summer, and in their report no doubt will deal with the subject with an intelligence gained from actual observation, and make many valuable suggestions as results of their experience there.

The subject has heretofore been treated somewhat theoretically in the reports of this Department, and the Secretary would prefer to await the disclosures of the committee and their suggestions rather than to offer any of his own. However, the suggestion made by the Commissioner of Education, that Army or Navy officers might be detailed as inspectors or supervisors of such schools as are established in Alaska is worthy of commendation. Such officers might regularly visit the schools, and see that the money appropriated by Congress was not uselessly expended, and that the inmates were properly clothed, housed, fed, and instructed according to the terms of the contract; for heretofore the schools of Alaska have been chiefly what are termed "contract schools," whereby the parties conducting them agree with the Government to teach a certain number of the native pupils a common-school education and to instruct them in some branches of industry suitable to the wants and habits of the native population, in consideration of such allowances as the Government may make.

These schools have undertaken to teach the boys certain trades, such as carpentering, shoe-making, tinning, etc., and the girls house-work, washing, ironing, sewing, and cooking. A disinterested inspection and rigid accountability, the Commissioner reasonably says, are as necessary in the management and supervision of these schools as in any ordinary business transaction in which the Government is interested.

The governor of Alaska, in his report, which will be published, states that from the report of the school board the average attendance at the Indian schools has not been entirely satisfactory; that the board has not had the general co-operation of the Indian parents, and he recommends that a sum of money be included in the annual appropriation for schools in the Territory to provide for the payment of a small monthly

salary at each village where there is a school, and compel the attendance of the children. This recommendation is approved.

In June Dr. William T. Harris, of Concord, Mass., the present Commissioner of Education, was engaged to make a report on the educational features of the Paris Exposition, which he was about to visit. This work is in course of preparation. There was also commissioned Mr. Samuel M. Clark, of Iowa, to represent the Bureau of Education at the Paris Exposition, and a report of his observations will be duly submitted.

The preparation of monographs on the educational history of the different States has been committed to Dr. Herbert B. Adams, of Johns Hopkins University, who reported in February last very satisfactory progress. This work is still proceeding under his care, and no doubt will prove worthy of his great reputation.

It is to be remarked in considering this valuable report that the Bureau of Education does not depend for its success to any great degree upon the executive force of the Secretary of the Department, but rather upon the intelligence and discretion of its own chief officer. It is a bureau capable of conferring upon the country great advantages. It may, and no doubt will, be made the store-house of the vast amount of literature which chronicles the experience of teachers and philosophers upon the best methods of education; a place of common exchange of ideas and information between not only the teachers of our own country, but between them and those of foreign nations; an instrumentality for measuring yearly the advance or decline of the educational spirit, and of education itself among our people, and a source of many valuable suggestions to our legislators in their efforts to preserve the intelligence of the people by the encouragement of institutions of learning, and chiefly the public schools, upon which will ever depend the perpetuity of our institutions.

This Bureau heartily is recommended to the favorable consideration of Congress for such liberal appropriations as may not only maintain it in its present condition of efficiency, but enable it to greatly extend its labors and its benefits.

ARCHITECT OF THE CAPITOL.

The Architect of the Capitol reports the following improvements made on buildings and grounds during the fiscal year.

Steam-heating has been extended to the committee rooms and Senate Library in the attic of old portion of the Capitol. New steam boilers have been placed in the vaults of the House of Representatives. Drinking fountains have been placed in the connecting corridors of each wing of the building. The pictures in the Rotunda have been protected by strong brass railings. A tunnel for use with a power

elevator for the House wing is well under way. The marble and granite works of the terraces and stairways are nearly completed. The grading of the lower part of the terrace has been finished and planting has continued along the base of the structure, while trimming and re-adjustment has gone along as required by the growth of the older trees and shrubbery. Repairs have been made on the Senate stables and engine-house.

The Armory Building on the Mall has been arranged and fitted up for the accommodation of the offices of the Commissioner of Fisheries. A large frame building has been constructed for storing material connected with the Smithsonian Institution. Large coal vaults have been constructed at the north front of the court-house, and sundry repairs have been made on the interior of that building. New hot-water boilers for the conservatory have been put in place and granolithic pavement put down at the First street entrance to the Botanical Garden; a large amount of painting and glazing has been done, and the extensive damage done to the buildings by the storm of September 17, 1888, repaired.

The heating of the Capitol during the last session of Congress was done in a highly satisfactory manner, and the electric lights in the Senate wing gave good results, but as the system is deemed objectionable, nothing has been done towards extending it, nor has the plant been accepted or paid for, pending expected legislative action on the subject. It is suggested that the construction of the western terrace of the Capitol seems to require that the central portion of the building be extended and remodeled.

The following table exhibits the condition of the appropriations for the various improvements referred to:

	Appropriation.	Unexpended balance.
Improvement and repairs on Capitol.....	\$35,000.00	\$536.22
Capitol terraces.....	190,047.09	56,394.67
Capitol grounds.....	20,060.00	24.74
Lighting Capitol and grounds.....	24,000.00	2.13
Electric-light plant.....	18,965.96	18,714.31
Steam-boilers, House wing.....	12,000.00	1,836.91
Pavement for fountain in front of terrace.....	29,000.00	27,800.45
Repairs of Armory Building.....	7,000.00	856.35
Drinking fountains.....	1,202.37	297.63
Brass railings.....	390.00	110.00
Senate stables and engine-house.....	400.00	.....
Coal vaults and repairs to court-house.....	3,400.00	.....
Total.....	341,405.42	106,573.41

GOVERNMENT HOSPITAL FOR THE INSANE.

The report of the board of visitors discloses the following important facts regarding this institution:

There is a marked improvement in the docility and manageableness of different classes of patients, owing to improved facilities and sanitary conditions afforded by late additions of room and improvement of grounds.

The yield of farm, garden, and dairy products for the year for the use of the hospital amounted to \$32,272.12 in value, a general average increase over former years.

All the appropriations called for seem necessary for needed repairs and improvements.

The admissions for the year ending June 30, 1889, have been 280; the discharges, including 114 deaths, have been 244, leaving 1,397 under treatment at the close of the year. The recoveries are reported as 70, it being 28.69 per cent. of the discharges, including deaths. The daily average number in the hospital has been 1,373, which shows a steady increase in its population. The per cent. of deaths to the daily average number resident is 3.39, which is very nearly the average per cent. for the last ten years, and is considerably below what the advanced age of so large a proportion of the hospital inmates would lead us to expect. The veterans of the late war continue to be received in undiminished number from the Home for Disabled Volunteer Soldiers, although each returning season thins their ranks in the outside world and adds to the burden of years of the survivors.

The convict and criminal class of the insane, including military prisoners, now constitute a considerable item of the population, being 63 in number. It is clear that Howard Hall, the building erected for this class of our inmates, was not opened a day too soon. This building has accommodation for 60 patients in single rooms.

It is no longer a question whether more accommodations are to be built—the steady increase in population has settled that—but what form shall such additional accommodations take? What is the annual increase in the number of the insane for whom this provision must be made? The average annual increase for each year has been almost exactly 4 per cent., which means provision for an annual increase of accommodations to the extent of 50 beds. It is important that this additional accommodation each year should take the form which will afford the most perfect classification and hence the greatest relief to the whole.

The estimates for expenditures for the fiscal year ending June 30, 1891, are:

For current expenses.....	\$313,500
For general repairs and improvements.....	15,000
For special repairs and improvements, viz:	
Lodge at lower entrance.....	2,000
Infirmary wing, with connections.....	36,000
Completing changes in heating apparatus, including new chimney and boiler house.....	8,000
Extension of kitchen and furnishing same.....	5,000
Rebuilding carpenter and machine shop.....	4,000

The estimate for current expenses is for support in the hospital, including treatment and clothing, of an estimated average number of 1,425 indigent insane persons, who by law are entitled to treatment here, viz, the insane of the Army and Navy, Marine Corps, Revenue-Cutter Service, National Home for Disabled Volunteer Soldiers, the indigent insane of the District of Columbia, and the United States convict insane.

The basis of estimate is an annual per capita cost of \$220. Congress has of late provided for a portion of this expenditure in the bill making appropriations for the District of Columbia. The amount in the last bill was \$85,000. Based on the ratio of increase of inmates from the District during the past year, the amount to be appropriated in this bill will be \$87,500, leaving the sum of \$226,000 to be provided in the sundry civil bill, of which sum it is asked that not exceeding \$1,500 may be used as hitherto, in defraying the expense of the return of patients to their friends.

The statistics of the hospital for the last ten years show that it is necessary each year to provide additional accommodations for fifty patients. The hospital pavilion for the sick, now rapidly progressing towards completion, will furnish within the present fiscal year accommodations for fifty of the sick and paralytic class, which will give a degree of relief to our crowded wards that the same amount of provision could afford in no other way. It is apparent, however, as the work progresses that an adjoining infirmary wing for the feeble ones, and the convalescents risen from their hospital beds but too infirm to return to the common wards, a wing with broad piazzas open to the sunshine and air, is especially needed in connection with the hospital pavilion; and since it is imperative to provide fifty additional beds somewhere, it is good economy to make that provision where, in the present as well as in the future development of the institution, it will do the most good. A connection by an arched way with the main building is indispensable for convenience in conveying material and inmates to and from the infirmary group as well as for efficient supervision of the whole; \$36,000 is asked to complete for fifty beds this remaining wing of the pavilion together with the necessary connections with the hospital.

The sum of \$5,000 is asked for extension of the kitchen, with the furnishing of the same. When the appropriation for a detached kitchen

was made in 1822, the hospital contained 942 inmates, and it was a question if the projected new kitchen was not extravagantly large. Now, with the number of patients already exceeding 1,400, the necessity for extension is apparent. The contemplated change, which it is thought can be made for the estimate, will give ample cooking accommodations for 2,000 persons, a number beyond which it is hoped the hospital will never be called on to provide.

The carpenter and machine shop, built in 1856 upon ground that did not afford a sure foundation, has been in almost daily use ever since, and with the constant jar of the machinery and the gradual settling of the walls, cracks have appeared in the brick-work which are visibly widening, making it unsafe to introduce any additional machinery, and necessitating its being taken down and rebuilt on a firm foundation and an enlarged plan better suited to the present wants of the hospital. Four thousand dollars will be needed for this purpose.

For the purchase of additional agricultural land, \$10,000. This hospital, with 1,400 patients, has barely 200 acres of land available for farming, gardening, and grazing purposes. The remainder is occupied with lawns and groves, and sites of buildings devoted to the care of the insane, together with a considerable portion in wooded ravines whose cultivation is out of the question, but which are the charm of the grounds, affording secluded and delightful walks for the inmates. A great majority of the inmates belong to the chronic class, for whom the best treatment is work about the grounds at farming or gardening. With sufficient arable lands of good quality there is no reason why all vegetables consumed by the inmates, except rice, should not be produced on the hospital farm, and a considerable part of the labor of cultivation be that of the insane.

It is not essential that land for this purpose should be adjacent to the hospital buildings. Outlying fields that may still be purchased at the price of agricultural land will do very well, but it is important that these be secured at once, before the advance in all real estate in the vicinity of Washington leaves nothing but house lots available for pasturage.

COLUMBIA INSTITUTION FOR DEAF AND DUMB.

The pupils remaining in this institution on the 1st of July, 1888 numbered 87; admitted during the year 25; since admitted 19; total 131.

Under instruction since July 1, 1888, males 102; females 29. Of these 65 have been in the collegiate department, representing 18 States and the District of Columbia, and 66 in the primary department.

The receipts for the year have been :

Balance from last year	\$125. 29
From board and tuition	6, 443. 06
From labor, rent, and sale of products.....	868. 77
From appropriation	55, 000. 00
	<hr/>
	62, 437. 12
	<hr/>
Total expenditures.....	61, 941. 53
Balance	495. 59
	<hr/>
	62, 437. 12

The board of directors report that the proviso attached to the last appropriation for the institution limiting the amount to be paid on salaries and wages will result disastrously to the welfare of the college unless it be modified at the ensuing session of Congress. They represent that for a number of years the amount paid out for salaries has not fallen under \$31,000, and that such amount is necessary to procure the services of efficient teachers.

They further represent that the additional proviso adopted, that students from the States and Territories shall receive only tuition and not support free, will revolutionize the character of the institution and destroy the larger portion of its beneficent efficiency, in that it will close its doors to the poor and make it in the future an institution for the rich only, who might find accommodations in any of the numerous other institutions.

By the policy pursued during the twenty-five years of the life of the college the pecuniary circumstances of every applicant has been carefully investigated, and whenever there has been an ability to pay the full charge for board and tuition has been insisted on. In cases where pecuniary inability has been evident the charge for board and tuition has been remitted, always on the recommendation and at the request of the member of Congress from the district in which the applicant resides.

In no instance has the institution assumed the support of a collegiate student. Those receiving the greatest assistance have provided their own clothing and books; they have met all traveling expenses, and have been at their own charges during the long summer vacation.

A large majority of these youths have come from homes hundreds of

miles distant from Washington. Nearly all of them have worked hard during the vacations to earn money enough to meet the expenses above referred to of travel, clothing, etc. Many of them have been employed as farm laborers, coal and iron miners, and in other severe occupations.

The appropriations called for are :

To meet the deficit of the current year above referred to.....	\$3,000
For support of institution, including salaries, incidentals, and repairs.....	58,000
For the care and improvement of grounds	3,000
	<hr/> 64,000

It is suggested in the report that the appropriation for the support of feeble-minded children in the Pennsylvania Institute is entirely inadequate to meet the demands of that class in the District of Columbia.

Two notable events in the history of the college have occurred during the year: one, the unveiling of a statue on Kendall Green of the celebrated teacher and philanthropist, Thomas Hopkins Gallaudet; the other, the sending of Professor Draper as a delegate to an International Congress of Deaf Mutes, held at Paris, of which Professor Draper furnishes an interesting report.

FREEDMEN'S HOSPITAL.

During the fiscal year there were treated in the hospital proper 2,279 patients, and in the dispensary attached, 2,317. There were 261 surgical operations performed. The total number of admissions was 2,074, against 1,997 during the preceding year. Of this total 161 was births within the institution, as shown with other important information in the following table compiled by the surgeon in charge.

	White.			Colored.			Grand total.
	Male.	Female.	Total.	Male.	Female.	Total.	
Remaining June 30, 1888	28	14	42	85	78	163	205
Admitted	429	85	514	714	685	1,399	1,913
Born	4	3	7	89	65	154	161
Total	433	88	521	803	750	1,553	2,074
Total in hospital	461	102	563	888	828	1,716	2,279
Discharged	412	87	499	659	657	1,316	1,815
Died.....	20	6	26	135	92	227	253
Still-born				9	5	14	14
Total	432	93	525	803	754	1,557	2,082
Remaining June 30, 1889	29	9	38	85	74	159	197

During the year ninety cases of alcoholism, including delirium tremens, were treated. Ninety-seven ex-soldiers were admitted and treated on

the recommendation of the Commissioner of Pensions and twenty-eight on the recommendation of the Board of Managers of the National Soldiers' Home.

The contract under an appropriation by the last Congress for stables, wagon-shed, and dead-house, has been let and the buildings are under way.

The surgeon in charge finds that there is need for a small building of at least four rooms for patients with contagious diseases, and I am of the opinion that an appropriation should be made for this purpose.

It appears from the report of the surgeon that the laws in force in the city of Washington on the subjects of gambling, pool selling, and liquor selling have had the effect of driving a large portion of these disreputable branches of business just over the city limits in the immediate vicinity of the hospital, to the great demoralization of that neighborhood and annoyance and detriment to the management of the hospital. Principally as a consequence of this state of affairs there has been occasion during the year for the treatment of 115 gun-shot and other wounds, all the results of personal encounters. This state of affairs would seem to call for additional legislation.

MARYLAND INSTITUTION FOR THE INSTRUCTION OF THE BLIND.

On the 3d of June, 1888, the Department had 15 pupils in this institution; during the fiscal year 7 were admitted, 1 withdrawn, 2 completed the course; remaining 19.

The institution is in every way well equipped for its work and seems to be very successful. In addition to the usual branches of literature, science, and music, the female pupils are taught hand and machine sewing, knitting and crocheting, and the males broom and mattress making, chair caning, and piano tuning.

WASHINGTON HOSPITAL FOR FOUNDLINGS.

The hygienic conditions of the asylum have been materially improved. As a result the health of the inmates has been excellent. No epidemics nor contagious disease, except chicken-pox, have existed in the hospital during the past year. The percentage of deaths has been unequalled in the history of similar institutions, not a death having occurred for some time past.

The capacity of the institution is for fifty children, but there is *not* building capacity to accommodate attendants for so many.

Instruction in printing has been added to the industrial course of training with encouraging results.

There are thirteen employes.

The appropriation for the year was \$7,600; other receipts, \$2,808.42;

total, \$10,408.42. Total expenditures, \$8,189.70. The present value of the grounds and building is placed at \$72,775.

The last Congress appropriated \$5,000 for a new wing to the building, but as the amount was found entirely inadequate to its erection nothing has been done with it.

Many important repairs have been made during the year and the building is now in good condition.

There were in the hospital July 1, 1888, 20 children; 31 were admitted during the year, making a total of 51. Of these 12 were adopted.

Applications for the adoption of children have rapidly increased. They reach the hospital from distant points. When received the standing of the applicants, both socially, morally, and financially, are carefully investigated, and the applications are favorably considered only when the inquiries are satisfactorily answered. The children are placed for adoption where the directors are convinced that their condition in life will be materially improved, and thereafter the management keep well informed of the progress of such children, and both retain and exercise the right to resume control over them when not well cared for. In the past year twelve children have been placed in comfortable homes situated in New York, New Jersey, Wisconsin, Missouri, the District of Columbia, Maryland, and other States.

It is proposed during the ensuing year to put in operation in the Asylum a school-room for the children of sufficient age to require instruction. This will obviate the necessity of sending children outside of the institution to be educated.

It is also proposed to start a training school for nursery-maids.

EDUCATION OF FEEBLE-MINDED CHILDREN.

During the year ten of the District children have received education and support at the Pennsylvania Training School for Feeble-Minded Children under the provisions of the act approved June 16, 1880, at a cost of \$2,367.50. The Department has not yet, however, been furnished with a general report from the institution for the past year.

HOT SPRINGS RESERVATION.

This reservation consists of 2,019 city lots, covering 1,270.10 acres; streets and alleys, 358.37 acres, and four separate reservations, to wit:

Hot Springs Mountain, 264.93 acres; North Mountain, 224.74 acres; Sugar Loaf Mountain, 129.02 acres; and West Mountain, 281.94 acres; aggregating 900.63 acres.

Of the city lots 320 are yet undisposed of.

There are thirteen persons and co-partnerships owning bath-houses or bath-house sites or claims on the permanent reservation who paid water rent for the year just closed. The names of these houses, sites,

or claims, the number of tubs paid for, and the monthly receipts from each, are as follows:

Name.	Tubs.	Amount.
New Rector	26	\$65.00
Little Rector.....	5	12.50
Big Iron	40	100.00
Superior	16	40.00
Old Hale.....	21	52.50
Un-named (leased site).....	20	50.00
Independent	21	52.50
Palace	23	57.50
Horse Shoe	30	75.00
Magnesia	30	75.00
Ozark	22	55.00
Rammelsberg.....	18	45.00
Lamar	40	100.00
Total	312	780.00

The "Little Rector" is purely mythical. No house, no tubs, no water; but the "water-rent" is paid each month in advance. The "Un-named," leased site, is unoccupied and has no existence whatever except an unexpired lease. The "water-rent" on this site—20 tubs, \$50—is paid monthly in advance.

There are, including the 25 imaginary tubs, 312 tubs in the bath-houses, leased sites, and claims on the permanent reservation, paying water-rent—monthly, \$780; annually, \$9,360.

There are six persons or copartnerships owning bath-houses or claims off the reservation who paid water-rent for the last fiscal year as follows:

Name.	Tubs.	Amount.
Avenue.....	20	\$50.00
Rockafellow.....	20	50.00
Grand Central.....	11	27.50
Hot Springs	12	30.00
French	4	10.00
Sumpter.....	4	10.00
Total	71	177.50

The "French" is not in existence, having been destroyed by fire some two or three years ago. The "Sumpter" is a hotel without tubs. The "water-rent" on each is paid monthly, in advance. Including these two there are six houses off the reservation paying a water-rent on 71 tubs of \$177.50 per month, or \$2,130 per year.

The Arlington Hotel is on the permanent reservation and pays an annual rental of \$1,000, which is paid quarterly in advance.

The ownership of the first thirteen named above, except the "Little Rector," are given in the last annual report of my predecessor in office.

Congress authorized the leasing of water rights to three new bath-houses off and below the permanent reservations. In accordance with such authority leases have been made to (1) W. W. Eastman, Minneapolis, Minn.; (2) William L. Baueroft, of Port Huron, Mich.; (3) Moses P. Hayes and F. C. Laird, of Minneapolis, Minn.; Phillip Reilly, of St. Paul, Minn., and George W. Baxter, of Hot Springs, Ark.

The lease of the Arlington Hotel (which expired December 15, 1888) has been renewed for ten years to S. H. Stitt & Co., a firm composed of S. H. Stitt, Samuel W. Fordyce, and A. B. Gaines, at the annual rental of \$1,000, as provided by act of Congress. The actual annual rental value of this property was estimated by a committee of Congress in 1882 at \$10,000, and it has no doubt appreciated since, though the early opening of a larger and more elaborately finished and furnished hotel in the city may have quite a depreciating effect on this value. But acting on the theory that the limit of \$1,000 is far too low, and that Congress will be apt to increase it at an early day, care has been taken to have ample provisions inserted in the lease for the full effect of any legislation on the subject that may be adopted.

In this lease I have also inserted a provision limiting the prices at the hotel, both as to rooms and board, and which is as follows:

For one person, occupying a single room, the rate charged shall not exceed \$21 per week, including board, lodging, lights, fire, and attendance.

For two persons, occupying a double room, the rate shall not exceed \$40 per week, including board, lodging, fire, lights, and attendance.

I have also inserted a proviso that said hotel shall be kept in first-class style and order, and that the proprietors shall furnish and serve to guests at said hotel as good fare and accommodations as can be had at the same rates at any other hotel in the United States.

A copy of said lease will be found annexed to this report.

I have to recommend that Congress take early action in regard to this reservation and either authorize the Secretary of the Interior to take entire jurisdiction of the rental of these premises, with the other hotels and bath-houses within the Hot Springs Reservation, or that Congress itself fix a schedule so that the property may be made to pay an amount sufficient to at least improve the surroundings of the place and make it healthful and attractive. At present, while large sums of money are made by those who enjoy the highly valuable privileges upon this reservation of the Government, the revenue from the profits made by the occupants of the Hot Springs properties is entirely inadequate, and they could readily and easily pay a very considerable sum to be either deposited in the Treasury of the United States or expended as suggested.

There is no reason that the Hot Springs Reservation, with all the valuable qualities of its waters, the salubrity of its climate, and the beauty of its surrounding country, should not be made as attractive

and comfortable to its many visitors as it is certainly of great advantage to them in alleviating or curing their ailments.

The expiration of bath-house leases on the permanent reservation bear dates as follows: Old Hale, Rector, Independent, Big Iron, Palace, Ozark, and Rammelsberg, December 15, 1888; Magnesia, May 31, 1888; Horse Shoe, January 11, 1888; Lamar, July 31, 1888; Superior, January 1, 1889; and Unnamed, December 17, 1890.

There have been several applications for renewal of these leases, but none of them have yet been renewed.

There are nineteen water privileges paying rent, all told, not including the Arlington Hotel, but of these there are only fifteen bath-houses in actual existence. Nine of the fifteen are in an association, called a pool, for the regulation of prices. Of the nineteen privileges, eleven are controlled by the association. The claims of the parties to the pool seem to be that by the arrangement they obviate a costly rivalry which enables them to cheapen service to their customers. Those opposed to pooling say that the results of destroying rivalry are poorer accommodations to the public. It would seem advisable, in any legislation on the subject, to discourage pooling, especially in view of the fact that the patronage of the Springs is increasing so rapidly that the time seems very short until there will be demand by the afflicted for all the accommodations that can be afforded.

The accounts, receipts and expenditures, may be stated as follows:

Receipts:	
Water rent.....	\$11,490.00
Ground rent.....	1,000.00
	<hr/>
	12,490.00
Expenditures:	
Salaries, expense, repairs, improvements, etc.....	6,368.90
	<hr/>
Balance.....	6,121.10

This shows a net income to the Government, on account of the Hot Springs Reservation, of \$6,121.10 for the fiscal year.

The free bath-house is an institution set apart by Congress, where the afflicted poor may come and take the baths without price or hinderance. "The superintendent shall provide and maintain a sufficient number of free baths for the use of the indigent." (Act of Congress, approved Dec. 16, 1878.) Under these conditions about 450 free baths are furnished each day except Sundays. This aggregates about 12,000 per month, and 72,000 per year.

By act of Congress approved October 2, 1888, the sum of \$31,000 was appropriated "for providing a system of reservoirs, pumps, and piping, and for other purposes necessary to the collection and economical distribution of the hot water."

At the request of this Department the Secretary of the Navy detailed Passed Assistant Engineer G. W. Baird, U. S. Navy, to proceed to the Hot Springs and prepare plans and specifications for the collection and distribution of the hot water under the above provision. Mr. Baird

has performed this duty to the satisfaction of the Department, but the contract for work on the improvement has not yet been let.

As there seems to be much waste of water and use of it in supplying vapor baths for which no account is made to the Government, the plan of leasing by tub capacity should be abolished, water-meters constructed, and the actual amount of hot water used charged for.

The present superintendent, Frank M. Thompson, suggests an appropriation of \$10,000 for the improvement of the four mountain areas set apart for public parks, which seems but reasonable, and I earnestly recommend it. In his report he says:

Many thousands of people visit this marvelous valley each year, and the number is constantly increasing as the years come and go. Each of the numerous cures adds additional fame to the mystic powers given to these waters by agencies unknown to man. The effect is known and felt by thousands, but science and learning have so far failed to discover or report the cause. They are truly one of Nature's gracious blessings to man. * * * Their name and fame have become national and world-wide. * * * Capital and skill from many States have been attracted here to provide for the comfort and necessities of the thousands of visitors. * * * Spacious hotels and bath-houses are being erected. Indeed this city seems to have been born again.

It would then appear proper and seasonable for the Government to keep pace with this grand onward march. Congress has reserved the four mountains overlooking this "valley of vapors" from sale, and dedicated them to the public use as parks, where the visitor may have quiet and rest and invigorating atmosphere and enjoy the scenery that is charming, sublime, and beautiful. Private capital is doing much more in this direction than the Government. But it is hoped that the Government will at least keep pace with private enterprise.

I also recommend that section 12, act of March 3, 1877, and section 7, act of June 16, 1880, be amended so as to authorize the sale of lots from the reservation at Hot Springs instead of at Little Rock. The experience of the Department under the present law upon this subject was referred to in the annual report of the Secretary of the Interior for 1885, as follows:

At the two sales which have been held it has been claimed that combinations have existed among the comparatively few buyers in attendance to prevent fair competition and to secure the purchase of the lots at less than their real value. The lots were afterwards sold privately by the syndicate, and the profit which should have been realized by the Government were divided among its members. It is believed that if the sales could be held at Hot Springs the resulting increase in the number of bidders would render such combinations impracticable, and much higher prices would be realized.

This experience has deterred the Department from authorizing any sale of lots since the last auction, in May, 1884, and any further sales would seem to be inadvisable under existing law.

The "Little Rector," of four tubs, referred to as mythical, seems to be a bath-house privilege claimed by the New Rector Company and appertaining to a hot-water spring flowing from the bluff at the corner of the Arlington Hotel and running under that structure into a sewer. The tub rent is paid by that company for the sole purpose, as it would seem, of preventing some one else from utilizing the water for bathing facilities.

YELLOWSTONE NATIONAL PARK.

The conditions of government for the Yellowstone National Park are anomalous. By the act approved March 1, 1872 (U. S. Revised Statutes, sections 2474 and 2475), it is provided that—

Such public park shall be under the exclusive control of the Secretary of the Interior, whose duty it shall be as soon as practicable to make and publish such regulations as he may deem necessary or proper for the care and management of the same. Such regulations shall provide for the preservation from injury or spoliation, of all timber, mineral deposits, natural curiosities or wonders within the Park and their retention in their natural condition.

He shall provide against the wanton destruction of the fish and game found within the Park and against their capture or destruction for the purpose of merchandise or profit. He shall also cause all persons trespassing upon the same to be removed therefrom and generally is authorized to take all such measures as may be necessary or proper to fully carry out the objects and purposes of this section.

Under this statute the Secretary appointed a superintendent of the Park, and established rules and regulations for the government of the same, the latest edition of which was published under date of January 1, 1888, a copy of which is attached. (Exhibit A.)

Congress made appropriations for the payment of the superintendent up to and including the year 1886, but in the appropriation bill for the fiscal year ending June 30, 1887, approved August 4, 1886 (U. S. Statutes at Large, vol. 24, p. 240), this provision was omitted.

An act of Congress, approved March 3, 1883, provides that—

The Secretary of War, upon the request of the Secretary of the Interior, is hereby authorized and directed to make the necessary detail of troops to prevent trespassers or intruders from entering the Park for the purpose of destroying the game or objects of curiosity therein, or for any other purpose prohibited by law, and to remove such persons from the Park if found therein.

There being no appropriation for the fiscal year ending June 30, 1887, to pay a superintendent, the Secretary of the Interior requested the Secretary of War, under the act approved March 3, 1883, to detail an officer with a detachment of troops for the government of the reservation.

Capt. Moses Harris, First Cavalry, with a troop of cavalry, was detailed for this duty, and reached Mammoth Hot Springs August 17, 1886, since which time the policing of the reservation has been done solely by the military. On the 1st day of June, 1889, Captain Harris was relieved from duty in the Park by Capt. F. A. Boutelle, First Cavalry, under orders from the War Department. From the brief opportunity I had of observing Captain Harris's administration of affairs, I am of the opinion that he filled the position with great activity and efficiency. His report up to the date of his relief, together with that of his successor for the balance of the fiscal year, is appended.

LEGISLATION NEEDED TO GOVERN THE PARK.

As tending to show the uncertain character of the legal status of "persons and things" in the reservation, I take the following extract from the last report of my predecessor, Hon. William F. Vilas:

It is at present doubtful whether there be any judicial tribunal whose jurisdiction extends over this reservation, and the peril of this condition demands early action from Congress. A robbery of the passengers of a stage-coach occurred within its limits during the past year, and the criminals were arrested and turned over to the authorities of Montana, but the jurisdiction to punish the offenses committed there appeared so doubtful that the district attorney accepted a plea of guilty of larceny and the parties escaped with the infliction of the punishment of that offense only, although the much higher penalty for highway robbery was the true measure of guilt. A bill passed the Senate during the past session of the present Congress, which was framed with the approval of my predecessor, and will, if enacted, doubtless tend largely to relieve the difficulties. It is to be hoped that during the next session it may become a law.

Section 5 of the regulations above referred to provides—

Hunting, capturing, injuring, or killing any bird or animal within the Park is prohibited. The outfits of persons found hunting or in possession of game killed in the Park will be subject to seizure and confiscation.

Under this provision, Captain Harris had seized the "outfits" of certain trespassers, consisting of live stock and certain hunting, trapping, and camping material, and upon inquiry was directed to sell the same; but afterward, the question of the legality of the confiscation arising, the matter was referred to the Assistant Attorney-General of the Department, who rendered an opinion to the effect that such property can not be legally forfeited and sold. Thereupon Captain Boutelle was directed to return the same to the owners if they could be found, on condition that they take it out of the Park and keep it out. Although no trespass is reported during the last fiscal year, it is apparent that there is no adequate preventive remedy for such as may be threatened nor penalty for such as may occur in the future.

The legislature of Wyoming, in the winter of 1884, passed—

An act to render operative and effectual the laws of the Territory of Wyoming within that portion of the Yellowstone National Park lying within said Territory, and to protect and preserve the timber, game, fish, and natural objects and curiosities of the Park, and to assist in preserving the rights of the United States therein.

This act, which was approved March 6, 1884, made the portion of the Park lying within Wyoming Territory a part of Uintah County; provided for voting precincts and for the election of justices of the peace and constables; extended the laws of Wyoming Territory over the portion of the Park within that Territory, and provided that the rules and regulations of the Secretary of the Interior for the government of the Park should have the same force in the Park as the laws of Wyoming Territory.

Section 7 of this act provided—

That it shall be unlawful for any person, whether resident or visitor, to deface, injure, or remove any part, portion, or particle of the natural curiosities or objects of interest, or anything whatever within the Yellowstone National Park, whether tree,

rock, stone, shrubbery, earth, geyser formation, grass, or anything whatever, except that it may be permissible to use timber or any other thing not objects of curiosity or of interest or adding to the scenic attractions of the said Park, for the necessary purposes of fuel or house-building, or any domestic, useful or necessary, purpose not prohibited by the laws of the United States or the rules and regulations of the Secretary of the Interior, and any person so offending shall be guilty of a misdemeanor, and shall on conviction thereof be punished by a fine not exceeding \$100 or by imprisonment in the county jail not exceeding six months.

Section 8 provided for the protection of the game of the Park and fixed pains and penalties. The act further provided that a jail should be established in the Park; that the expenses of all criminal prosecutions and the salaries of the justices of the peace and constables should be paid by the Territory of Wyoming; and that one-half of the fines assessed against offenders under the provisions of the act should be paid to the informers.

Judged by the stringency of its provisions, this act should have afforded to the Park all needed protection, and yet it completely failed in its object. Vexatious arrests were made under the sweeping provisions of section 7 of the act, and it soon became evident that its tendency was to defeat the principal object for which the National Park was established. Instead of a "pleasure ground for the benefit and enjoyment of the people," it seemed likely to become a place where visitors would be subject to arbitrary arrest and serious annoyances for the most ordinary and innocent actions.

The indignation aroused by certain arrests, which appeared to have been made without sufficient cause or justification, together with the uncertainty which existed as to the authority of Wyoming Territory to exercise judicial powers within a national reservation which had been placed by law under the exclusive control of the Secretary of the Interior, caused the repeal of the obnoxious act March 10, 1886.

Speaking of this repeal, Captain Harris says:

The repeal of this ill-considered and unwarranted act was a necessity, but as it was the first and only law under which judicial authority had been exercised in the Park, the first effect of its abrogation was to leave the Park in a worse plight than ever before. It became generally known that the superintendent had no support beyond the rules and regulations of the Department and their own personal force, and, as a result, the rules and regulations were ignored, while outlaws and vagabonds from the surrounding region made the national pleasure ground a place of refuge. The hotels were frequented by gamblers and adventurers, who preyed upon the unwary tourist, while forest fires, originating mysteriously in remote and inaccessible places, raged unchecked.

Considering the large number of visitors who annually resort to the Park, there has so far been a remarkably small amount of crime of any grade reported, but it is certainly a very dangerous experiment to leave so large a scope of country, with some permanent and increasingly larger transitory population of from 6,000 to 10,000 people, without any legal protection for "life, limb, or property," and without the means of punishment for the most dastardly crime which may be committed.

"THE VEST BILL."

This dangerous condition of the reservation led the friends of the Park to prepare a bill, commonly known as the "Vest Bill," by which the whole subject of jurisdiction was provided for, as also penalties for violations of law. That bill, in addition, provided for the boundaries of the Park as reported upon by a scientist of the highest reputation, having charge of the United States Geological Survey in the Park. The bill was very carefully prepared. It has passed the Senate three times—the last Congress by a unanimous vote. Substantially in the same form it passed the House, but failed to become a law because passed at a very late day of the session.

In the House the bill has been always favorably reported. The difficulty there has been that certain persons interested in getting a railroad through the Park have had enough influence to induce the committee to tack onto the bill a railroad amendment. This project the friends of the bill have always opposed, as they regard its success as destructive to the interests of the Park. The advisability of the railroad measure was reported against by Secretary Lamar, and when it came before Congress as a separate bill it was defeated in the House by a large majority.

I can not but earnestly recommend that such a bill as the Vest bill before spoken of, should be passed for the protection of this property and for the punishment of those who are disposed either to destroy the game there or to injure the features of this wonderful land. At the same time also I wish to say, as hereinafter more fully expressed, that a railroad through the park would lead to its early destruction for all the purposes for which it was originally intended.

LEASES FOR HOTELS, ETC.

On the 22d day of March, 1889, the Yellowstone Park Association, having surrendered all rights which it had acquired under a lease which had been granted on the 9th day of March, 1883, to Carroll T. Hobart *et al.*, and by the said lessees assigned to the Yellowstone Park Improvement Company, and which had been sold under a decree of the United States court for the Territory of Wyoming, and by virtue of which sale the Yellowstone Park Association claimed title; and also all rights under a lease granted on the 29th day of January, 1884, to George W. Marshall for a certain piece of land in the park, and which had been assigned to the Yellowstone Park Association; and the Yellowstone Park Association, by Charles Gibson, its president, and Charles Gibson individually, having delivered up the lease made by the Department to Charles Gibson, March 20, 1886, for certain lands in the park, and the said lease having been declared canceled, the Department, on the 20th day of March, 1889, granted to the Yellowstone Park Association six leases of ground in the Yellowstone National Park, as follows: At

Mammoth Hot Springs, 3 acres; at Norris Geyser Basin, 1 acre; at Lower Geyser Basin, 2 acres; at the Grand Cañon, 2 acres; at Yellowstone Lake, 1 acre; and at the Thumb (so called) of the Yellowstone Lake, or on Shoshone Lake, 1 acre.

The Department also granted permission on the 5th day of April, 1889, subject to certain conditions, to the Yellowstone Park Association to place a naphtha launch on the Yellowstone Lake, the said launch to conform to certain specifications.

It is proper for me to say that in making the above leases and granting the aforesaid permission I was impelled solely by a desire to make the visits of our fellow-citizens to the Park more agreeable, and to induce them in greater numbers to view this wonderful country. Having been through it myself when I was compelled to stay for the most part in either tents or the smallest of cabins poorly constructed and with no accommodations that were at all comfortable, I have thought that if a series of hotels could be established under reasonable restraints, and preserving a reasonable control of them by the Secretary of the Interior, a great advance would be made in the prosperity of this national enterprise.

A copy of one of the leases made is to be found in the appendix of this report, and attention is invited to its provisions. I think it will appear sufficiently stringent to protect the interests of the Government.

February 14, 1889, the Secretary of the Interior granted permission to Ole Anderson, subject to certain conditions, to engage in the business within the Park of placing small articles in the waters of the hot springs, to be incrustated with the deposit left by the water, and of selling such coated articles to tourists, the privilege being personal and non-assignable. On the same date the Department granted to Mrs. Jennie Henderson Dewing, postmaster at Mammoth Hot Springs, the privilege of keeping for sale in the post-office at this place photographic views, stationery, etc., the privilege to continue only during Mrs. Dewing's term of office.

On the 3d of April, 1889, permission by the Department was granted to the medical officer attached to the military force to practice medicine in the Park, with the understanding that such practice shall not conflict with any army regulations.

As will be seen from Captain Harris's report, considerable progress has been made under the appropriation of the last fiscal year for that purpose in rendering the roads leading into and across the Park safe and comfortable. The hotel and traveling accommodations seem to be still inadequate but are being improved, and it is hoped that by another season tourists can make the circuit of the more interesting wonders of the Park without being subjected to any peculiar hardships.

Captain Harris and Captain Boutelle have made the preservation of the forests and fauna subjects of special interest, and wisely so. Captain Boutelle's report dwells upon the importance of the forests of this

mountainous region in regulating the water supply of the important agricultural and grazing lands whose river systems take their rise in the Park. These forests are necessary also for preserving in this great natural zoological garden a remnant of our North America fauna, particularly of the ruminants of the Western plains and mountains, now being so rapidly exterminated. The increase of the deer, antelope, and elk within the last few years seems to be highly gratifying, and the reports show that a herd of buffalo continue to find safe refuge there. The carnivora have multiplied so rapidly, that Captain Boutelle thinks some means should be taken to repress their further increase. He remarks upon the increasing tameness of the animals of the Park in consequence of their annoyance and slaughter being prohibited.

Another suggestion of importance is that of stocking the waters of the Park with fish, of which they now seem to be remarkably barren.

Mr. McDonald, Commissioner of Fish and Fisheries reports that he has already largely stocked a great many of the streams and lakes within the limits of the Park, found absolutely void of fish. He has placed 5,000 eastern brook trout in the main Gardner River; 1,000 Rainbow trout in the Gibbon; 1,000 German or Von Behr trout in the Fire Hole and Nes Perces forks of the Madison; and 1,000 of the native red trout in east fork of the Gardner. He has also transferred 1,000 of the native white-fish to Twin Lakes, and 1,000 to the Yellowstone River above the falls. This work will be continued.

Forest fires are a great and increasing danger and damage to the Park, and Captain Boutelle's recommendation for an appropriation to clean up the underbrush and fallen timber along the lines of travel deserves attention. There also seems to be a pressing necessity for having the boundaries of the Park accurately surveyed and marked out, so that innocent parties may not unwarily trespass over the same.

I make the following extract from the report of Captain Harris:

In my experience in connection with this National Park I have been very forcibly impressed with the danger to which it is subjected by the greed of private enterprise. All local influence centers in schemes whereby the Park can be used for pecuniary advantage. In the unsurpassed grandeur of its natural condition it is the pride and glory of the nation; but if, under the guise of improvement, selfish interests are permitted to make merchandise of its wonders and beauties, it will inevitably become a by-word and a reproach.

And in connection the following from the report of Captain Boutelle:

I have reason to believe that schemes are on foot looking to the cutting off a portion of the northeastern corner of the Park. If the preservation of the game of the Park is worthy of consideration this should be strongly opposed, as some of the principal winter ranges of elk and buffalo are in the part proposed to be cut off.

So long as this tract of country shall remain a national preserve for science, curiosity, and pleasure, it will of course be an object of cupidity to the covetous, who will see or imagine countless ways in which its exhaustless wonders and resources can be turned into private advantage, and who will invent many artifices to beguile and circumvent

the guardians of this national treasure into granting them foot-holds of one kind or another, whereby they can make personal gain out of this great public benefit. If it is not to be thus frittered away, deprived of its most attractive features and measurably lost to science and wonder, if not to pleasure, the best and surest way to protect it is to permit no trimming down, no incursions, and no privileges except such as may be deemed absolutely necessary for its protection and regulation and for the proper accommodation and comfort of visitors.

It seems important that there should be an appropriation for a residence for the superintendent, whether he is to be a military or civil officer. If the Park is to remain under the surveillance of the military, the suggestion of Captain Bontelle that it should be recognized as a military post and provided with permanent accommodations for the officers, men, and their animals seems very pertinent. If it should be the policy of Congress to restore civil superintendence, attention is called to the recommendation of Captain Harris, in whose judgment I have great confidence, as to the number of employés and amount of appropriation necessary, which he places at forty-four men, all told, with salaries and equipments amounting in the aggregate to \$48,800.

THE TERRITORIES.

ALASKA.

The governor of Alaska states that since his arrival within the district on June 1, he has, so far as possible with the limited means of communication afforded, inspected the towns, villages, and business enterprises that were within his reach in southeastern Alaska, and inquired into the efficiency of the officers and employés of the Government and the pressing needs of the Territory for the protection of its people, its various industries, and for the elevation and civilization of the natives.

He estimates the population at about 36,500, of which number 3,500 are whites. He does not credit the reports in circulation as to the approaching annihilation of the native population by wasting diseases, but believes that the next census will disclose a larger number of natives than the last. He refers to the difficulty of reaching even an approximate estimate of the value of taxable property, growing out of the fact that, with the exception of the twenty-one fee simple titles given by the Russian-American Company to its employés and afterwards confirmed at the time of the transfer of the Territory to the United States, there are no valid titles to lands excepting mines and mill-sites; and also to the fact that the principal business enterprises are carried on by foreign corporations, whose products are shipped immediately to market or stored in the States. Taking these matters into consideration he regards an estimate of \$5,000,000 as above rather than below the value of the taxable property in the Territory.

The natives of Alaska are self-supporting. The United States real-

izes an income of \$317,500 from its contract with the Alaska Commercial Company alone, besides something from other sources. The annual expenses of the civil government amount to \$37,350 and the appropriations for the support of schools vary from \$25,000 to \$50,000, leaving a handsome net profit to the credit of the Territory.

In directing attention to the fact that titles to lands can not now be acquired within the Territory the governor strongly urges that Congress should afford relief by legislation from the difficulties now experienced. The town-site law as now in force elsewhere would in his opinion reach and remedy a large number of cases of real hardship, and a law giving some method of acquiring homesteads and fields for cultivation, which owing to the limited extent of arable land should not be in excess of 20 acres to each individual, would seem only just, and would do much towards substantial progress and improvement.

The immense forests of Alaska, consisting mainly of spruce, hemlock, and red cedar, are of excellent quality for economic purposes, and the milling facilities for its manufacture into lumber are ample for supplying the present demand. Much embarrassment is occasioned by the present timber law, which forbids any white person to use timber from the public lands even for domestic or local purposes.

The exports of Alaska consist mainly of furs, ivory, Indian curiosities, and the products of the fisheries and mines. Cranberries of superior flavor grow without cultivation, and one firm during the present season shipped some two thousand gallons to San Francisco. The following figures show the value of exports during the past year: Fish, oil, bone, and ivory, \$3,225,000; furs, \$1,750,000; gold (bullion, ore, and dust), \$2,000,000, and silver, \$50,000; a total of \$7,025,000.

Scarcely any progress was made during the year in the development of the agricultural resources of the Territory. No sufficient experiments have been made with grain, but the inference is that there is too much wet weather for wheat and too little warm weather for corn. Grasses of all kinds grow luxuriantly wherever the sun can penetrate the thick timber and brush. Vegetables, root crops, and all the small fruits, such as currants and berries, will grow luxuriantly, mature with certainty, and produce abundant crops for the harvest.

While there has not been that measure of progress and success in educational matters that could be desired, no effort has been spared to make the schools efficient and useful to the extent of their capabilities. Thirteen day schools, supported by the Government, are in session during the year. The total enrollment of pupils in these schools was about 1,040. The aggregate of salaries paid for the thirteen schools was about \$11,000. There were also four boarding schools aided by the Government. The Alaska Commercial Company maintained schools, one each on the islands of St. Paul and St. George. Full reports of attendance of pupils at these schools have not been received. Other mission schools have been kept at different points in the Territory, of

which enough is known to render it certain that much is being accomplished outside the schools receiving support from the Government.

The governor agrees with the chairman of the school board that the average attendance at the Indian schools has not been entirely satisfactory, the board not having had the general co-operation of the Indian parents. He recommends that a moderate sum of money be included in the annual appropriation for schools in the Territory to provide for the payment of a small monthly salary at each village where there is a school, and to compel the attendance of the children.

CONDITION OF THE NATIVES.

The governor refers to the conflicting reports as to the natives, and says that they present great contradictions of character, habit, and custom. As a rule they are deceitful, and there are those who do not hesitate to repeat sensational stories, without foundation, and these tales are sometimes published to the world, with additions, as established facts. Under the Russian occupation but little attempt was made to elevate the natives, while under the following ten or twelve years of "no government and military occupation" under the American flag there was little else but "rum and ruin." Though the improvement in the moral condition of these people during the last ten years has been marked, it must be admitted that they have not yet attained to anything like perfection.

Physically their manner of living has improved on the whole, but consumption and pneumonia prevail to an alarming extent. The governor suggests hospital treatment as the only way of providing proper treatment, and at the same time educating them in the care of themselves and the correct methods of living. He believes this to be due to them, and due to the protection of the whites.

The need of proper means of transportation for court officials, prisoners, witnesses, and jurors to and from the place of holding court is evident. The greatest hindrance to the rapid dispatch of public business is the want of such transportation, and the consequent difficulty in obtaining competent jurors. The governor recommends the purchase of a small vessel, fitted with one or two guns, for the use of the civil government. He specifies a warrant, for the arrest of certain persons charged with assault with attempt to kill, which is still unserved after a lapse of three months, because the marshal has no means of reaching the offenders. He also recommends the appointment of a commission to prepare a code of laws for the consideration of Congress, and urges that the mail facilities be increased by some special arrangement, suggesting the vessels of the Alaska Commercial Company or others. As an example of their postal difficulties he gives the following:

Some time in August last a letter was received from a missionary stationed in the Yukon district, complaining that they were in urgent need of an officer in that district who could administer oaths. * * * With all possible haste I issued him a commission as justice of the peace. That commission, however, is still in the mails, and he will not receive it before July next, at the earliest.

MINING.

Gold, silver, lead, zinc, and other minerals are found in the Territory, and many deposits of coal. The coal fields of the Kenai peninsula are very extensive and convenient of access. Coal from them can be delivered in San Francisco, it is estimated, at \$3.50 a ton. Its quality has been tested, and it is pronounced a cannel coal of great value. A large quantity has been taken out this year, and claims have been filed upon 3,200 acres of land.

FISHERIES.

The development of the immense resources of Alaska in respect to its fisheries has reached only its initial stage. The total pack of the present season at the salmon canneries will not much exceed 460,000 cases of four dozen pound cans. This is a falling off in the catch, although the last year's run was an exceptionally large one. One of the causes assigned for this is the diminution in the number of fish caused by over-fishing and the barricading of the streams so that the fish can not go up stream to deposit their spawn. The collector, to whom was assigned the duty of preventing the barricading of the mouths of the rivers, has not been able to give the matter attention, for want of transportation and money to defray expenses. Halibut are plentiful, and the attention of the fishermen is beginning to be called to this fishery as a source of profit.

In conclusion it is recommended that power should be conferred upon the governor to appoint justices of the peace and similar officers; that there should be provision for the extension of the land laws to Alaska; that arrangements should be made for the purchase of wood upon the public lands; that the fisheries should be regulated; that there should be Government hospitals for the treatment of chronic and hereditary diseases; that there should be a weekly mail-service in southeastern Alaska, and not less than four mails each way between Sitka and St. Michael's during the eight months best suited for traveling, with possibly a winter mail to the Yukon district overland; that the small steamer before referred to be provided; that a court-house should be built at Juneau; that a commission be appointed to prepare a code of laws, and that three deputy marshals should be provided for.

He closes by reverting to the need of representation of the Territory and its interests in some manner before Congress, and suggests that the governor should be permitted to reside in Washington during the session or a part of the session of Congress, to represent the Territory as its Delegate.

WASHINGTON.

Washington Territory has an approximate area of 66,800 square miles. The Cascade Mountains separate it into two distinct climatic divisions, differing widely in topography, in vegetation, and in soil. The climate of

the western portion is moist and warm, while that of the eastern is not unlike that of Virginia.

The census returns compiled from reports of county assessors show a population in April, 1889, of 239,544. This method of enumeration the governor does not regard as accurate or complete, and he estimates the present population at 275,000.

The taxable property is valued at \$124,705,449, an increase of 100 per cent. since 1887. The rate of tax levy for the present year is 2½ mills.

Of the 44,798,160 acres of land in the Territory 21,715,258 have been surveyed. Of the unsurveyed portion about 7,000,000 acres are mountainous, and for the most part unsuitable for settlement. The total number of acres disposed of during the year at the different land offices and by sales of railroad lands was 841,988.41.

The governor considers the growth of commerce during the year to be exceedingly gratifying, although no accurate statements can be rendered, owing to the fact that a large portion of the grain product of the southeastern section, the salmon pack, and the lumber of the Columbia River find their way to market by way of Portland and Astoria. The influx of population has given new impulse to every avenue of trade throughout the Territory; the expansion of commerce has kept pace with the increase of population, and the volume of business has doubled within two years.

The total railroad mileage within the Territory has increased from 1,197.7 in 1888 to 1,548.2 in 1889. Construction is progressing on several lines. Only a small percentage of the lands of the Territory suitable for grain growing has yet been brought under cultivation. The crop of grain fell short of its usual average on account of the light rain-fall. The total export for the year ending June 30, 1889, was, approximately, 7,000,000 bushels. The shipment of hops for the present year has not been ascertained at the time of the report; for 1888 it was 8,202,287 pounds.

Stock raising, though still profitable, is diminishing in importance. Large areas formerly the range for stock have been converted into grain fields. No complete returns of the number of stock cattle have been made. The number of sheep has been estimated at 7,000,000. There are at present twelve developed coal mines in the Territory, of which the total output for the year was 1,833,801 tons, a decrease of 216,198 as compared with 1888, which is attributed to competition with British Columbia mines and the decline in price in San Francisco and other markets.

Lumbering, the first industry developed in the Territory, is still the most important. The entire western slope of the Cascade Mountains, down to the Pacific Ocean, is covered with a dense growth of timber, estimated at 20,000,000 acres. The lumber exported during the year aggregated 755,000,000 feet.

Liberal provision has always been made for the support of schools in Washington, and they have been a source of pride to its citizens. The tax levy for school purposes in 1889 was \$339,081.39. Considerable revenue has also been derived from the leasing of school lands.

By the terms of the enabling act the State will receive in round numbers 2,000,000 acres of school lands, which, if sold at the minimum price of \$10, will yield \$20,000,000 for school purposes; much of the land could be sold for from \$20 to \$30 an acre. In addition to this, 5 per cent. of the proceeds of the sales of public lands lying within the State goes to the permanent school fund. For the maintenance of a scientific school 100,000 acres are appropriated, and for State, charitable, penal, educational, and reformatory institutions 200,000 acres.

The governor of Washington reports that the closing year of Territorial existence has been one of unexampled prosperity. Population has increased more rapidly than in any previous year, property valuations have grown proportionately, railroad construction has been active, sales of railroad lands have been unusually large, and business houses and manufacturing establishments have multiplied throughout the Territory. It has had, however, an undue share of great disasters, the business portion of the cities of Seattle, Vancouver, Ellensburg, and Spokane Falls having been destroyed by fire, involving a loss of not less than \$16,000,000. He states that these calamities, though serious, have not affected the prosperity of the new State. Credit remains unimpaired, abundant capital has been offered from the East for rebuilding, no word of discouragement is heard, but everywhere there is evidence of renewed energy and ambition.

A constitutional convention, held in pursuance of the act of Congress approved February 22, 1889, met at Olympia July 4 and framed a constitution, which was submitted to and ratified by the people at a general election on October 1.

The governor states that the subjects for national legislation in which the people of Washington are especially interested are: Liberal appropriations for continuing work on the canal at the cascades of the Columbia River, and construction of a boat-railway at The Dalles; appropriations for the improvement of navigation in the Upper Columbia and Snake Rivers; the improvement at Gray's Harbor; the allotment of lands in severalty to all the Indians on reservations, and the throwing open of valuable lands to settlement; the establishment of a naval station at some point on Puget Sound; the adjustment of the limits of the land grant of the Northern Pacific Railroad Company, and the completion of the Nicaraguan Canal.

MONTANA.

The governor states that the area of the Territory is 91,000,000 acres, of which it is estimated that 36,000,000 acres are cultivable. Crops were raised in 1888 on 331,382 acres. He strongly urges the adoption

of a comprehensive system of irrigation to make available for agriculture the now waste lands of the Territory.

The total number of acres of public lands settled upon during the year is shown by records of the several land offices to be 452,428,041, of which 5,169 acres were mineral and 12,889 coal lands, the remainder being principally homestead, desert, and pre-emption entries.

No census of the Territory has been taken since 1880, when the population was found to be 39,159. The total vote for Delegate to Congress in 1888 was 40,014, and estimating upon this, allowing one vote to four inhabitants, would give a total population in 1888, of 160,056. To this may be added the immigration into the Territory in 1889, as given by railroad companies, at 10,250, and 15,000 Indians, making a total population June 30, 1889, of 185,306. This is, however, a very conservative estimate, and the census of 1890 will show probably a population of more than 200,000.

The total assessment of the Territory has increased from \$18,609,802 in 1880, to \$67,430,533.70 in 1889. Property is not taxed over 60 per cent. of its value. With a tax levy of only 2 mills on the dollar for Territorial purposes, all current expenses have been paid in cash, and a surplus has been maintained sufficient to meet all emergencies. On the 30th of June last there was a cash balance of \$88,265.67 in the Territorial treasury, with no outstanding unpaid warrants. The aggregated indebtedness of the sixteen counties of the Territory is \$1,500,000, mostly incurred in the erection of court-houses and other buildings, and in the construction of roads and bridges.

There are now completed within the Territory 1,784.9 miles of railroad, 283.5 miles are under construction, and surveys have been made for 875 miles, upon which construction has not been begun, but which it is expected will be built during the coming year.

The total value of exports for the Territory, consisting mainly of gold, silver, copper, lead, beef, cattle, horses, sheep, wool, and hides, was \$45,750,000. The total number of cattle is estimated at 1,250,000, of horses at 220,000, and of sheep at 2,150,000. Sheep are increasing more rapidly than other stock, and the wool clip of 1889 is estimated at 12,000,000 pounds. The wool growers of the Territory are deeply interested in the question of tariff on wool, knowing that with the long and expensive haul to market and the high rates paid for labor and supplies, they could not compete with prices of the foreign articles, if admitted free, and would be driven from the field of competition.

The chief source of Territorial wealth is mining. Since the settlement of Montana, a quarter of a century ago, the product of its mines has reached \$200,000,000.

But two things are needed "to realize the full fruition of her hopes, and to compensate justly the hardy pioneers who have builded up a magnificent commonwealth from the wilderness:" First, the free coinage of silver by the Government; and, second, the collection of full

duty on all lead ores imported from Mexico, whether in association with silver or not. The lead producers of Montana confidently rely upon this Administration and Congress to afford the necessary relief in this matter. Montana produced 12,000 tons of lead this year, but has been able to do so at a profit only under the stimulus of the high price consequent upon the assurance of a ruling of the Treasury Department favorable to American producers.

The sawed lumber product of the Territory during the year is estimated at 150,000,000 feet, valued at \$22,500,000. During the past summer more timber has been destroyed by forest fires than could have been used by the entire population of the Territory in a generation.

Since 1872 Montana has had a public school law adopted from that of California, and the schools have steadily grown in favor and usefulness. All the cities and large towns have substantial, commodious, and well-furnished school-houses, with excellent teachers. The attendance has been good, considering the large area of some of the school districts. With increased means to be derived from school lands donated by the General Government, and with more compact settlement and training-schools for teachers, much better results are expected for the future than have been realized in the past.

By the enabling act Congress has provided that none of the school lands which will become available for the support of public schools upon the admission of Montana as a State shall be sold for less than \$10 per acre, nor leased for a longer period than five years. As it will be many years before the greater part of these lands will be marketable at the price fixed and as the term of lease is so short as to discourage permanent improvement, the governor recommends amendment of the law so as to leave the State free to act in the matter as it may deem for the best interests of the people. .

The statistics relative to schools present a comparison between the years 1878 and 1888, showing an increase in the number of schools in that period from 80 to 316, and of the value of school-houses from \$67,700 to \$646,670; in the number of school children from 4,704 to 27,600; in teachers from 104 to 442, and in the amount of county tax for school purposes from \$47,323 to \$317,442.37.

The governor discusses at some length the question of irrigation and the best methods of reclaiming the said lands, as one of paramount importance to the people of the Territory, and concludes that—

The best and only easy way of accomplishing the end desired is that Congress grant to each State in the arid belt, or to each Territory upon its becoming a State, all the irrigable lands within its borders held by the General Government, such States to be charged with the supervision of their reclamation and with their disposal to actual settlers, the proceeds to be used in providing storage reservoirs and in constructing canals and other facilities for conducting the water to the proper points for distribution.

In conclusion, the governor remarks that the State constitution, adopted by an almost unanimous vote of the people, is believed to be

fairly conservative as well as progressive, providing for economy of administration, for ample and positive restrictions upon legislation and extravagant appropriations of public money; for salaries of public officers proportioned to the services to be rendered and the capacity of the people to pay; prohibiting special legislation where laws of a general character can be made applicable, and restricting taxation and the creation of public debts. The interests of labor are amply cared for, and public schools are provided which are to be open to the children of all alike. He expresses the belief that a careful perusal of its provisions will satisfy any candid mind that a State government, administered in harmony with its spirit and intent, will cause an immediate increase in the wealth and population, and in the happiness of the people.

DAKOTA.

The Governor of Dakota in his report contradicts the popular impression that his State is a country of extreme cold; really there is no area in the United States with more pleasant sunshiny days than Dakota; the mean temperature varies from 35.1 at Fort Seward to 45.5 at Yankton; precipitation from 13.76 inches at Fort Abercombic to 31.03 at Fort Meade. For the year 1888 there were 273 clear days. The area is 150,932 square miles, and the soil is of great fertility. The surface is for the most part a vast undulating plain, the Black Hills constituting the only mountainous regions of any extent. Much of it is heavily timbered, though in the newer portions of central and western Dakota the plains are bare. In this connection the governor suggests, in the interests of the settlers, the amendment rather than the repeal of the timber-culture act.

A careful estimate on June 30, 1889, gave the population as 650,000, of which 379,000 are in South Dakota. The foreign-born population constitute about 33½ per cent., the larger number being Scandinavians.

There is a large demand for both skilled and unskilled labor, and wages range from 50 cents to \$3 a day.

Up to June 1 the settlement of lands showed an increase in the past quarter of the year. The total acreage of lands entered or purchased of settlers approximates 2,600,000 acres. With the Sioux Reservation the vacant lands will amount to 30,000,000 acres.

Mass-meetings have been held to discuss the subject of irrigation. One hundred and thirty-five artesian wells have been bored at an average depth of 1,000 feet, the average discharge per minute ranging from 1,800 to 3,000 gallons. Congressional appropriation is urged for the furtherance of this, since the only fear for agriculture is a failure of rain. Bonanza farming is carried on to some extent in northern Dakota; thus farms, consisting of many thousand acres, are divided into sections and worked on a system which reduces the cost of production to a low figure. Dakota is eminently an agricultural region, wheat being the leading industry. The cultivated area is estimated this year to be

10,000,000 acres. Large crops of barley, oats, flax, and potatoes are raised. Stock-raising is increasing rapidly; in 1889 its value was \$49,426,961. The wool industry is beginning to develop. Dairying is becoming an important business.

MINING.

The Black Hills are a great mining region, and considerable progress has been made there in the past year. Vast deposits of tin have been recently discovered in the Harney Peak regions, and steady progress has been made in the production of gold and silver, the output for this year being equal to that of last. A good deal of prospecting for coal has been done in the hope of finding cheap fuel, and in the vicinity of Hay Creek, particularly, some valuable mines have been opened, but the railroad facilities are not sufficient for development.

EDUCATION.

It appears from the statement of the superintendent of public instruction for Dakota that the schools are very extensive and flourishing; the attendance during the last year was 93,826, being 74 per cent. There were 4,425 common schools and 42 normal schools. The disadvantage in the school system is that 72 counties are operating under the township and 16 under the district system. The township system will probably be adopted as the better. There are 3 colleges, 2 normal schools, a school of mines, a deaf-mute school, and a reform school, all public institutions, as well as 14 private academies and colleges. The Indian schools own property aggregating in value \$100,000. The percentage of school enrollment has risen from 50 per cent. in 1875 to 93 per cent. in 1889. Two papers are wholly devoted to educational purposes. There are teachers' institutes and associations for benefit and instruction.

ASSESSMENT AND TAXATION.

Valuation has increased only 2 per cent. during the past year, largely from the fact that several millions of railroad lands assessed in 1888 have been withdrawn from taxation because of an act of the legislature providing for a tax on gross earnings in lieu of other taxes on railroad property, and from the fact that the assessors placed the valuation at a low figure, with the idea that in this way the county would be obliged to bear a less amount of the Territorial taxation. The total assessment for 1889 was \$164,199,876. The financial standing of the Territory is very high, although the bonds bear a low rate of interest.

MILITIA.

The Territory has a well organized and equipped militia, 986 in number.

PENITENTIARY.

The number confined on June 30, 1889, was 85. The cost of maintenance of the penitentiary for one year is \$10,070.30. The cost of improvements was \$8,679.87.

REFORM SCHOOL.

There are 33 inmates in all in this institution, 24 being boys and 9 girls, who are carefully educated and taken care of.

INDIANS.

The Indians are peaceably disposed. The total Indian reservations include 26,751,805 acres, of which the Sioux Reservation comprises 21,593,129. The Indian population in 1886 was 32,500; 16,000 being practically civilized and 700 wholly barbarous. They have 20,000 acres in cultivation. Of a school population of 7,000, the average attendance is 1,293.

The governor incorporates in his report short reports from the agents of the Cheyenne River, Pine Ridge, Sisseton and Crow Creek Agencies, from which it appears that the Indians at those places are more or less rapidly acquiring the ways of civilization. They all report the schools in flourishing condition.

The resources of Dakota are immense and as yet largely undeveloped. About one-half the area of Dakota has been entered for land claims up to the 30th of June, 1889. In addition to the minerals already alluded to, which are gold, silver, tin, and coal, and the finding of oil and natural gas, the Territory is rich in possessing the finest building-stone—the so-called Sioux Falls granite, which is extensively shipped to neighboring States, and which when found at a certain depth below the surface is fire-proof; also in possessing the finest cement known, the Yankton cement, surpassing in adhesive power that of Portland.

IDAHO.

The present population of Idaho is estimated to be 113,777, including 25,000 Mormons. The assessed valuation of all property is about \$25,000,000. Its area is 55,228,160 acres; of this about 8,500,000 acres have been surveyed, and about one-half of the surveyed lands have been entered under the several land laws. A large per cent. of the surveyed claimed lands are so distant from streams that the expense of irrigation is too great for individuals to undertake. The governor urges larger appropriations for the survey of the Territory, as fully one-third of the surveyed lands are too broken or mountainous for agricultural purposes. Hundreds of settlers who have made valuable improvements are unable to obtain patents to their lands, and are still "squatters" tolerated by the Government.

The principal industry of the Territory is mining. The yield of valuable metals is nearly double that of last year, and amounts to \$17,344,600 in gold, silver, lead, and copper. Much attention has been given to stock-raising, and as in other Territories the grade of cattle and horses is improving. Sheep-raising is increasing rapidly, and is found profitable.

The vast forests of Idaho demand particular attention, and the governor earnestly recommends that Congress take steps toward the preservation of the valuable belts of timber, by passing suitable laws providing for the employment of foresters, etc.

Interesting details of the public-school system are given. In the southern counties, commonly known as the Mormon counties, there is a decided opposition manifested to it by the Mormons; many of them refuse to send their children to school unless the teacher be of the same faith, and the "Gentiles" refuse to permit their children to be subjected to Mormon influences. Thus the public schools are between two fires, but the school offices are gradually coming into the control of the "Gentiles," with good results for education.

There is a scarcity of women servants, who, the governor states, would get ready employment at twenty and thirty dollars a month. A table of wages is given in the report.

There have been no outbreaks of Indians in the Territory since the last annual report. Their general condition may be said to be good, and when they have all received their lands in severalty the governor believes they will be contented and their advancement in civilization be more rapid. He recommends that the question of the removal of the Lemhi Indians to the Fort Hall Reservation be renewed, and that they be urged to select homes there or on some other reservation. There is not sufficient agricultural land on their present reservation to give each Indian 5 acres. It may be well to mention that these Indians have recently refused to accept the provisions of an act of Congress for their removal to the Fort Hall Reservation.

UNITED STATES PENITENTIARY.

Attention is earnestly called to the condition of the penitentiary located at Boise City, where there is pressing need of additional accommodations and of some means of employing the prisoners. At present they are confined by twos in small cells which were only intended for a single prisoner each, and there are no means of employing them or of giving them necessary exercise. He requests authority to employ the prisoners in taking out stone from the quarry near by, for the purpose of surrounding the building with a good and substantial wall. He says:

I can not present too strongly the importance of hastening these much needed improvements. * * * The prisoners have a right to expect humane treatment, which is out of the question in their present crowded condition.

LEGISLATIVE.

Attention is called to the difference between the salaries of the governor and secretary as provided by statute and those appropriated. The governor's salary, he says, is not enough to defray his actual expenses, and that of the secretary requires the closest economy. He recommends that an amendment be made to the act of March 3, 1885, which provides that the Territorial courts shall take cognizance of Indian offenses under which the Territory is obliged to pay the United States for the board and keeping of Indians sentenced to its penitentiary, in addition to the expenses of their trials. He believes that the General Government should pay the expenses, as in the case of United States prisoners, rather than compel the Territory to pay.

He earnestly recommends the passage of a bill by Congress, giving the necessary authority to the Territory to appropriate for and construct a wagon-road through a certain portion of the Territory.

The governor devotes a considerable portion of his report to the subject of irrigation, and says:

IRRIGATION.

The application of water to the arid lands of the Territory has demonstrated beyond question the great productiveness of the soil. Millions of acres of land in Idaho plains and plateaus, once classified as a great desert, have been proven to be as fine agricultural land, when irrigated, as found in any part of the United States.

The great problem has been and is now, how can water be conveyed to lands lying high above, and in many localities far distant from, streams from whence the water must be brought to irrigate? Another grave question is, how can the water that goes to waste for more than one-half the year be garnered to be used during the season of irrigation? These are questions that should be considered, not for the present requirements only, but looking to the welfare of the generations to follow.

The vitality of agriculture and the peace and prosperity of those engaged in cultivating the soil are deeply concerned in the solution of this great question, which has to-day a greater significance to the settlement of our lands and populating the Territories than any other.

Prompt and decisive action should be taken looking to the control and application of water under some well formulated system. Each year's delay renders any general system more difficult, for the reason that hundreds of additional water-rights have been filed. To reconcile all those claiming priority of right is a question also to be considered in the adoption of a general system.

I do not feel justified in giving my views as to the best method of handling this great and important question pending the report of the Senate Committee on Irrigation.

Inasmuch as the act of Congress, at its last session, in making a liberal appropriation for the survey of the arid regions, with a view to the supply of water for irrigation, was so expressed as to give prominence to reservoirs and but slight reference to surveys for canals and ditches, it was feared the Geological Bureau might so construe the act as omitting canal surveys altogether. To counteract such a construction, if found necessary, and to get the work of surveying begun in Idaho as early as possible, were subjects of especial concern, and received immediate attention through a timely report made in February last to the Department, by the surveyor-general, presenting some of the features of portions of Idaho which are similar to those of any other State or Territory. Thus was official attention directed to Idaho, and an early commencement of irrigation surveys here satisfactorily obtained.

The action of the Senate in appointing an able and efficient committee of its members to visit, personally inspect, and report on the whole subject of the reclamation of our arid region will give us strength in the halls of Congress and educate the whole country to the fact that our arid region has arable land enough for a kingdom, and our dry, basaltic soil is the best in the world. Water is about all the fertilizer it will ever need.

MORMONISM.

Fully one-fifth of the population of the Territory are Mormons. Polygamy is not at present openly practiced, but that it is practiced secretly there seems to be no doubt, as indictments are found at nearly every term of the court, and quite a number have been convicted. The governor has not the means of obtaining information as to the truth of the charge that plural marriages are still contracted in secret in their tabernacles. He states that he has ground, however, for believing that there is a division of sentiment in the church on this question.

The "test-oath" was decided by the supreme court of the Territory to be valid, and is now on appeal to the Supreme Court of the United States. The declaration of rights adopted by the first constitutional convention contains an article prohibiting polygamy forever.

STATEHOOD.

On April 2 last Governor Stevenson issued a proclamation recommending that the people elect delegates to a constitutional convention, to meet at Boisé City on the 4th of July, 1889. The present governor supplemented this proclamation on May 11, fully indorsing his predecessor's recommendations. Seventy-two delegates were elected, and the convention was in session three hundred and thirty-four days. The constitution adopted by them was voted on on the 5th of November and accepted by the people. The Territory now awaits legislation by Congress.

WYOMING.

The governor of this Territory submits a long and interesting report, replete with valuable information as to its resources, its political organization, and the steps which have been taken with a view to its prospective statehood.

Wyoming is the youngest of the Territories, but contains 62,645,120 acres—nearly 100,000 square miles—and, when admitted, will be the eighth in size of all the States. Its population is estimated at from 95,000 to 105,000. Of this vast domain the governor estimates that between 12,000,000 and 15,000,000 acres can be successfully cultivated, and that nearly 10,000,000 acres are as yet covered with timber.

The governor states that while the contraction of the open ranges and other causes has lessened the cattle industry in Wyoming, it still remains the chief industry; at present comprising nearly one-half of the total wealth of the Territory. The grade of cattle has improved, and better modes of management are being adopted. He believes that ulti-

mately stock-farming, or the combination of agriculture and stock raising, will greatly increase the total number of cattle, their quality, and profits to the Territory.

Sheep raising is now established on a permanent and paying basis. The low price for wool during the tariff agitation has been discouraging, but confidence is returning with the friendly attitude of woolen manufacturers and Congress regarding protective tariff. Nearly all the grazing lands in the Territory are adapted to this industry.

MINING.

The mining industry of Wyoming presents perhaps the greatest possibilities of any of its resources. There are not only the precious metals, but inexhaustible quantities of coal, petroleum, iron, and soda. The governor gives a long list of other minerals which are found in large deposits, also a large variety of building stones. The area underlaid with coal exceeds 30,000 square miles, double the coal-fields of Pennsylvania. More than 2,000,000 tons are annually mined, exceeding \$5,000,000 in value. A number of oil-wells have been opened, and only await better transportation facilities for development.

The wealth of the Territory is estimated at \$100,000,000, and its total bonded indebtedness, \$320,000. It has no floating debt, and had on October 1, 1889, \$47,752.76 in cash in its treasury. The financial standing of the Territory is high. Its bonds, bearing 6 per cent. annual interest, sell at above 12 per cent. premium.

The governor states that land matters in the Territory were set back for several years by the withholding of patents and the disposition of those in authority to regard all settlers with suspicion. This has been greatly improved, however, by the recent action of the General Land Office in issuing numerous patents unjustly withheld. The governor gives as his opinion that the general land laws of the United States are apt to work great hardship and injustice to the actual settlers of the mountain regions, where crops are seldom raised without artificial irrigation, and 160 acres is insufficient to support a farmer's stock. He urges the need of appropriation for surveys, and complains of the injuries worked by fraudulent surveys made under the "special deposit system."

IRRIGATION.

The need of a general system of irrigation is urged, and the action of the National Government in making an appropriation for the examination and survey of reservoir sites is commended by the governor. He says:

It is to be hoped that it will result in such early action by Congress as shall secure the full utilization of the waters of our streams and the retention and use of the waters which now run to waste during the winter months and during the early summer floods. While private enterprise will undoubtedly carry out the work necessary to the full utilization of the average summer flow of our streams, the work of constructing an extensive system of storage basins for holding back the flood-waters and the water

escaping during the non-irrigating season is an undertaking of great difficulty, and involves an outlay which will, except in a few favored localities, prevent the work being undertaken by private business enterprise. There are sites for such storage-basins on nearly every stream, and their improvement would result in a very great extension of the cultivated area over what would otherwise be impossible.

TIMBER.

The governor recommends legislation providing for the leasing of timber lands, under certain restrictions, and urges that the use of timber by settlers and others, under proper regulations, would in a great measure prevent the spread of fires which every year devastate large areas. He gives as his opinion that the amount of timber used in this way does not reach 5 per cent. of the total amount consumed by forest fires. He believes it to be important that Congress should set aside large forest reservations at the sources of the great rivers, and reserve them from disposal under existing laws.

EDUCATION.

Compulsory education is the law of Wyoming, and a high standard of the public schools has been maintained. The census of 1880 reported less illiteracy in Wyoming than in any other State or Territory in the Union. The Wyoming University at Laramie offers free the benefits of a higher education, and good graded schools are supported in all the larger towns and cities. The Territory has already derived benefit from the act of August 9, 1888, providing for the leasing of school lands for the support of the public schools.

Under the head of labor supply, the governor says that the question of the cost of living in the Territory, as compared with the States east of the Missouri, is one frequently asked. He answers it by saying that wages are from 35 to 50 per cent. greater than in the Middle States, while the cost of living in towns and cities on the railroad is 10 to 20 per cent. greater, and he submits a list of approximate current wages that merits attention by those meditating immigration to this Territory.

STATEHOOD.

The people of the Territory are anxious for statehood. Although the present administration has greatly relieved the situation by appointing all Territorial officers from among bona-fide residents of the Territory, yet the people desire the full benefits of citizenship. The governor says that, having been requested by a majority of the counties to apportion the number of delegates, with the aid of the chief justice and secretary, and to aid otherwise in the convening of a constitutional convention, in the manner and form prescribed in the Senate bill which failed to pass, an appointment was made on the 3d day of June, 1889, and a proclamation issued designating the second Monday of July, 1889, for an election for delegates. The convention met at Chey-

enne, and was in session from September 2 to the 30th, of the present year. The result of their labors was the constitution and an address to Congress, which he attaches to his report, together with his proclamation and apportionment of delegates, and he recommends that at the coming session of Congress an act be passed providing for the admission of the Territory as a State.

The Governor also submits some recommendations as to the care of the National Park, which being almost wholly within the bounds of the Territory, is of special interest to its people, and urges more efficient means of administering justice to offenders within its bounds; that a larger force of troops be detailed for its care, and that a special appropriation be made for the clearing away of fallen timber, to prevent fires, which there do great damage. He also recommends that the Territory be reimbursed to the amount of \$8,000, which has been expended in protecting the Park prior to March, 1886.

UTAH.

The governor of Utah, in his report for 1889, states that the total population of the Territory is 230,600, of which 96,935 are foreign born.

The total vote cast in the last election for legislative assembly was 20,496. Many counties have no form of apportionment, however, and do not receive proportionate representation. The governor, therefore, urges that a new apportionment be made by Congress after the new census, and also that Federal authorities should be authorized to appoint various officers to protect the apostate Mormons, in order that the "ostracism in force against them may be eliminated," and that they may be induced to remain in the Territory. The Gentiles are not in the majority, although their numbers are increasing, but the Mormons are the larger property-owners, as well as the more numerous, and are spreading in colonies over the neighboring Territories. With them it is the church first, the country afterward. The questions of politics and of church are so largely united that the issue becomes chiefly religious, the candidates of the church having great influence. A small number of Mormons broke away from the strict rules at the last election, and it is hoped that the number will increase.

The governor recommends, as a solution of the difficulties attending the enforcement of law in Utah on account of the conflicting interests of the people, that the political power be taken wholly away from the church, by virtue of the rules of which some of the most lucrative county offices descend, as does the priesthood, from father to son, to the exclusion of the "common people."

In regard to public schools the governor states that the tax raised is only half sufficient to support them; therefore tuition fees must be paid. He is of the belief that the Mormon people are preparing for denominational schools. This has been done in some counties, and children have been withdrawn from the common schools. It is advised that control

should be placed in the hands of the Federal authorities, as friendly to the public school system; and an increase of lands granted for school purposes, the total value of which is now only \$75,000. He considers that the Government should also take some measures so that the title to grazing lands in the Territory can be vested in persons engaged in raising stock, since there is at present no harmony of interest between those now occupying the lands, and disputes constantly arise.

Mining interests have been prosperous, and the total value of gold and silver exported has increased. Iron, lead, and copper are the ores found in greatest abundance; coal lies in extensive tracts. There is building stone of every grade and salt in large deposits. During the past year more attention has been given to the improvement of live stock, and large numbers were imported.

There are at present 598,590 miles of railroad in Utah, and companies are being formed for further construction. 420,302,984 tons of freight were shipped in 1888 and 1889 over the Union Pacific lines in Utah.

There is ready occupation for laborers of all kinds in the Territory. The average hours are nine a day, and wages vary from \$1.50 to \$4.50. The material prosperity of the Territory has largely increased. There is much immigration from the States, and large investments in real estate are being made.

The governor urges the erection of a public building for federal offices at Salt Lake City, where a considerable sum is paid annually for rent.

In regard to the Indians, he says that those on the Uintah and Uncompahgre Reservations are contented and should be self-supporting. Those in other parts of the State exist in small numbers and are nearly destitute. Against the proposed removal of the Colorado Utes to Utah a protest is raised as being dangerous to rights vested in the settlers.

Utah embraces 54,380,000 square miles of land and water; the proportion of mountainous land being 88 per cent. To correct the natural aridity it is recommended that unappropriated and unreserved lands in Utah should be ceded to the United States, from the proceeds of which reservoirs should be established to regulate the distribution of water. This might be made a condition on the admission of Utah as a State.

REPORT OF THE UTAH COMMISSION.

The Utah Commission, after August, 1888, proceeded to prepare for the voting for Delegate, and appointed a board of canvassers. The vote was 20,495, an increase of 4,342. The meager vote in proportion to the population is accounted for by the fact that the Mormons are largely in the majority, and the Gentiles, though naming a candidate, had no hopes of success. The Commission canvassed elections in twenty-three towns, and found them all free from fraud. The Gentiles won twice in the city election in Ogden.

Careful measures have been taken for fairness of ballot and for revising and correcting lists of voters. To carry out the provisions of the

Edmund Tucker act, the Commission appointed registrars from the non-Mormon element, and in the boards of election two out of three members are Gentiles. The wisdom of this is seen in the steady increase of the non-Mormon vote. Polygamy is not openly practiced. The Commission does not affirm or deny secret marriages of this sort; but in some cases it is impossible to avoid appointing Mormons as registrars, and no report of polygamous marriages has come from them. There were 357 convictions for offenses against laws of Congress since September, 1883. It is considered no disgrace for Mormons to have been in the penitentiary for such crimes, but a badge of merit, leading to advancement in the church, and they prefer to go to prison rather than promise in court to refrain in the future. The Commission expresses its opinion that in granting statehood to Utah, non-Mormons would be wholly deprived of political place or trust and would be boycotted.

As an instance of the feeling against the Gentiles, it is stated that the non-Mormon probate judge appointed by the President receives \$5 per annum, while the probate judge appointed by the Mormons makes \$200 per annum.

The Commission recommends that district courts be given plenary jurisdiction over sexual offenses against the laws of Congress; that these be excepted from the operation of the general statutes of limitation of the United States; that a person be condemned to two years' imprisonment for the first offense, and three for the second; that the appointment of Territorial officers be in the hands of the governor, with advice and consent of the Commission, and that a law be enacted preventing immigration of people seeking immunity from crime under cover of religion. It also recommends a constitutional amendment prohibiting polygamy. A law should be passed granting to a board, consisting of the governor, the Commission, and the secretary of the Territory, power to apportion Salt Lake City into aldermanic and councilmanic districts, and there should be annual revision of registrations.

MINORITY REPORT.

This report embraces two subjects, polygamy and public lands. After a long discussion on polygamy, showing that it is forbidden by the law of nature, a statement is made of the various laws enacted by Congress against it. As an example of their efficacy, it is asserted that during the years from 1862 to 1875 there were no convictions for polygamy, though crimes were rife; from 1875 to 1884 there were only two; the reasons given being that courts were powerless to reject or challenge jurors, and that the jurors refused to convict. The effect of this was to strengthen the Mormons in their belief that as a religious tenet polygamy would be protected by the Constitution of the United States. This was corrected by the ruling of the United States Supreme Court and the Territorial district court, that it belonged to the

inherent power of the court to provide itself with a jury, when necessary; since then there have been twenty-one convictions (from 1884 to 1889). As to voters not being disbarred from the polls for religious convictions the report recommends that polygamy by constitutional amendment be absolutely prohibited forever.

NEW MEXICO.

The governor, in his report for 1889, states that all land is under Spanish or Mexican grants, and no owner is required to present his claim. All grants of surveyor-general were confirmed before 1872, and one only since. The titles being unsettled, the governor recommends a limitation of time for presentation of grants and a special tribunal for hearing them and settling the title.

Much disappointment is felt in the Territory at its non-admittance as a State, and the governor argues against the idea that New Mexico is not prepared for statehood. It has elected legislatures for forty years; the ratio of illiteracy is decreasing; there are many public and private schools; the character of the native Mexican population is conservative and reliable. The number of inhabitants in 1885 was 184,141; the present number is estimated by the governor as a little under 200,000. Registered voters number 42,693. The assessed value of property in the Territory in 1888 was \$45,690,723, and estimates for 1889 show a moderate increase.

The rain-fall this year is reported as less than half of the average, and the rivers are lowered, the governor claims, by the system of irrigation practiced in the State of Colorado.

The system of azequias is recommended only for narrow belts, and is insufficient for large areas of land. That which seems most suitable is the reservoir system. The Rio Grande is at present practically dry, and private companies in numbers are formed for the purpose of irrigation.

The scarcity of water, though affecting crops in some parts, has not done so much damage as was feared. Wheat and other grains were harvested too early to be affected. There is a large increase in the number of orchards and vineyards, and foreign grapes have been introduced and are cultivated in Mesella Valley.

The stock business is in a depressed condition from over-supply; still there is a slight increase in the number of cattle.

The high price of wool gives new impetus to sheep raising, and the grade of sheep is improving.

MINING.

The greatest interest of the Territory are the mines, which are worked on a large scale, new ones constantly being opened. Lead would be favorably affected by doing away with the free introduction of cheap lead ores from Mexico. The expense of obtaining mineral patents

should be reduced, as it is so large as to deter many persons from undertaking the business. Coal mines are large and successfully worked. The undeveloped resources of New Mexico indeed now largely surpass in coal, mineral, grazing, and agricultural land, those of any other State or Territory of the Union.

EDUCATION.

Education is constantly improving. The school law is defective in not providing a Territorial superintendent, and there is also a lack in the school fund. The number of pupils at public schools is 16,803; teachers, 486; 143 schools are taught in English; 106 taught in Spanish; 95 with both. The governor urges an immediate sale of some portion of the school lands to form a school fund, such lands being now reserved from sale until New Mexico becomes a State.

Among the Indians, the Navajoes are constantly increasing in wealth. Their population numbers 21,000, and is increasing. They have a large amount of live-stock, horses, cattle, and sheep. The Pueblos have not changed their peaceable and orderly life, and Indian schools are flourishing. The governor urges the education of the most promising Indian pupils in medicine, and thinks there should be a good Indian physician in each of the Pueblo villages and in each reservation.

PUBLIC BUILDINGS.

Five new buildings were provided for by the last legislature: The University of New Mexico at Albuquerque, the New Mexico School of Mines at Socorro, the New Mexico Insane Asylum at Las Vegas, the Agricultural College and Agricultural Station of New Mexico at Las Cruces. As required, the people of the locality conveyed to the Territory the necessary land, ranging from 5 to 100 acres. Trustees have already been appointed, and building will commence when sufficient amounts have accrued from taxation; but the support is largely dependent on grants of land from Congress when New Mexico becomes a State. The governor urges that steps be taken for the preservation of the governor's palace at Santa Fé, as it is a most interesting and venerable structure.

ARIZONA.

The governor, in his report for 1889 states that the population of the Territory in 1882 was 82,966. The registered vote in 1888 was 11,538; an increase from 1886 of 711. The estimated population is now 60,948; the loss being due to the exodus of the mining population since 1882. The Mormons in Arizona hold the balance of power, and vote in a body as they think the interest of their church demands. They are in number about 8,000.

The governor urges the re-establishment of the act disfranchising the Mormons, whom he regards as a dangerous element in the Territory.

The taxable property amounts to \$26,575,692, now raised to \$30,000,000 by the Territorial board of equalization. The indebtedness amounts to \$752,000, at an average interest of 8 per cent. The governor asks authority to issue fifty-year bonds, at interest estimated not to exceed 5 per cent. He also asks that counties and cities may borrow from the Territory enough to pay off their debts and pay the same rate as the Territory pays. The saving thus made would amount to \$90,000 annually.

LAND ENTRIES.

The acreage is 500,798.15, value \$90,081.25. The governor does not approve the enforcement of the "irrigation law," and suggests that the land law be supplemented by a provision permitting the settler to give half his land, and to pay \$5 per acre for water right on the remaining half, with yearly payment of \$2 for dams. The desert land law alone is suitable to Arizona, and he advises granting these lands to Arizona as swamp lands are given to other States.

LAND GRANTS.

The governor urges settlement of land grants now before Congress, and pronounces the Peralta grant a fraud. He also advocates a survey of the Atlantic and Pacific Railroad lands.

The commerce of Arizona is much hampered by lack of railroad facilities, prohibitory rates, and charges for building materials, and it is advised that power be given the Territory to subsidize two northern and southern railroads through the Territory, by which immense benefits would be conferred. There are at present 1,096.327 miles of railroad in the Territory.

Agriculture and horticulture are largely held back also by lack of railway facilities; it is impossible to find consumption for what is now raised, there being no method of transporting the crops. Fruit culture, especially of grapes and figs, is increasing.

Stock-raising, though it has declined steadily since 1885, is still only second in industrial importance to mining industry, the climate of Arizona being especially adapted for the former. The breed of cattle is improving steadily, through the introduction of bulls of good blood.

Mining has had a healthy growth in the last year, and prospecting has largely increased. The industry is held back somewhat by the lack of sufficient transportation facilities.

The value of gold mined for 1888 was \$850,000; silver, \$356,000; a slight increase in gold and decrease in silver. The governor suggests that the mining law should be amended so as to require for each location or re-location a shaft 10 feet deep within ninety days. He also recommends legislation for mill-site reservoirs.

Arizona has a large area of forest, principally pine, spruce, yellow, and red juniper, also walnut, oak, and ash mesquite, and iron-wood. Saw-mills exist along the line of the Atlantic and Pacific Railroad, but "lack of transportation" prevents production up to their capacity.

The governor urges sale of timber from Government land, lumber now coming from Washington Territory.

The school system is liberally carried out, and the attendance is good. The Territorial University is in process of construction. The governor desires that Congress should permit the Territory to control the school lands under reasonable restrictions as fast as public surveys are extended over them, many sections now being farmed and the Territory receiving nothing.

The labor supply is equal to the demand. Wages range from \$1.50 to \$6.50 a day.

There are no Indian troubles since the removal of Geronimo.

The governor advocates the reduction in size of the Indian reservation, especially San Carlos, and urges that that part south of the Gila be cut off from the reservation.

As there are no public buildings in the Territory large rents are paid, amounting to \$10,440 per annum. The governor suggests the erection of public buildings at Tucson, Phoenix, and Prescott.

An appropriation for the building of artesian wells is advocated; also that Congress should allow franchise to the citizens of the Territory for election of President and to allow their Delegate a vote in Congress.

The governor discusses the validity of the acts of the legislature after the expiration of the sixty days, and asks that appropriate action be taken by Congress, since upon the legality of this depends most of the laws of Arizona. The Secretary joins in the recommendation on this point most earnestly. The affairs of Arizona are in a very unsatisfactory condition because of the want of confidence in the validity of the laws including even those for collecting a revenue for its Territorial government.

The governor also asks that he be given the power of removal for cause, which was dropped out of the code by the code commission under his predecessor, and that militia law be re-established.

There is no appropriation bill for 1888-1890, except the one depending upon the validity of the sixty-day opinion. The militia act and Mormon test oath are in the governor's judgment essential to the good government of Arizona.

Instances as to the effect of his want of power of removal are that of the superintendent of the Territorial prison, who is acting in violation of law in allowing prison convicts to work for private persons outside of the wall, and he is powerless to remove him. The commissioners of the insane asylum, upon the Governor's refusing to blindly sign warrants for the expense of asylum, have failed to do their duty.

The governor asks an appropriation of \$3,500 and \$2,500 for salaries for governor and secretary, the amounts now allowed of \$2,600 and \$1,800 being inadequate compensation for the services which these officers are required to perform.

THE MARITIME CANAL COMPANY OF NICARAGUA.

The report of this company had not been received up to the time of this report, but it is understood that the corporation has been organized and has commenced work under its charter. The report will be forwarded to Congress in due time on form heretofore prescribed by the Secretary of the Interior.

All of which is most respectfully submitted.

JOHN W. NOBLE,
Secretary.

To the PRESIDENT.

PAPERS

ACCOMPANYING

REPORT OF THE SECRETARY OF THE INTERIOR.

REPORT OF THE COMMISSIONER OF THE GENERAL LAND OFFICE.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., September 17, 1889.

SIR: I have the honor herewith to submit for your consideration the annual report of the transactions of the General Land Office for the fiscal year ending June 30, 1889.

On the 1st of June, 1889, the resignation of Hon. S. M. Stockslager, as Commissioner, was duly accepted, whereupon, being Assistant Commissioner, the duties and responsibilities of the bureau have devolved upon me as Acting Commissioner from that date.

This report therefore covers the doings of the General Land Office for eleven months under the administration of my predecessor and only one month under my own management.

Entering upon my duties as Acting Commissioner I found myself confronted with an enormous amount of unfinished business left over from former administrations in all the divisions of the office. This great accumulation of official work in arrears I found to result partly from the constantly increasing returns of the one hundred and seven local land offices in the several public land States and Territories, which has been met by no corresponding increase of clerical force, and in great part also by the prevalence in the office of mistaken methods and practices, which, in my judgment, had the effect of obstructing rather than facilitating the proper transaction of business. I found that much time was expended in the performance of what may be termed mere "division work," or work considered proper for the internal management of the different divisions, or consumed in work of a merely preliminary character as introductory to the important work on hand, or in useless guards against improbable or impossible irregularities, instead of being employed in efficient work directly applied for the prompt examination and rapid disposition of the cases arising. Thus a large number of clerks were employed in the performance of duties, laborious and intricate, which in no manner quickened the final disposition of business. On the contrary, I consider it as the true policy for the General Land Office to discard all unnecessary work, all roundabout methods of procedure, in seeking the desired practical results, namely, final examinations and patents, in the shortest time and by the most direct methods possible consistent with the proper execution of the laws. Any method, practice, or proceeding inconsistent with such a policy is objectionable and should be discarded.

Upon assuming the duties of Acting Commissioner I was instructed by you to institute a careful inquiry into the existing methods of doing business in the several divisions of the bureau, and to make such changes therein as would expedite as much as possible the final disposition of cases pending for examination.

Acting upon the instructions so received I found, upon an examination of the records, that during the four years of the prior administration of the bureau there had been an increase over the former accumulation of one hundred and five thousand cases awaiting action. Inquiring into the history of this unprecedented and embarrassing condition of things I discovered, among other obvious causes therefor, that on April 3, 1885, the following order had been issued :

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,
Washington, D. C., April 3, 1885.

Order.]

Final action in this office upon all entries of the public lands, except private cash entries and such scrip locations as are not dependent upon acts of settlement and cultivation, is suspended in the following localities, viz :

All west of the first guide meridian west, in Kansas ; all west of range 17 west, in Nebraska ; the whole of Colorado, except lands in the late Ute reservation ; all of Dakota, Idaho, Utah, Washington Territory, New Mexico, Montana, Wyoming, and Nevada, and that portion of Minnesota north of the indemnity limits of the Northern Pacific railroad and east of the indemnity limits of St. Paul, Minneapolis and Manitoba railroad.

In addition final action in this office will be suspended upon all timber entries under the act of June 3, 1878 ; also upon all cases of desert-land entries.

Very respectfully,

WM. A. J. SPARKS,
Commissioner.

It will be seen that by the foregoing order the claims of our pioneer settlers upon public lands were arbitrarily suspended and their adjustment indefinitely postponed without authority of law or departmental approval to support it.

This attempted nullification of the land laws, so far as the contemplated final action on claims is concerned, was received with indignation, and, as might have been foreseen, excited universal complaint from all portions of the country, led to the accumulation of unadjusted claims to a burdensome extent in the General Land Office, and greatly discouraged settlements upon the public domain.

On December 3, 1885, the Commissioner issued a further order, as follows :

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., December 3, 1885.

The order of April 3, 1885, is modified as follows :

The Commissioner will certify to and request the issue of patents upon all entries not subject to reasonable doubt, viz :

- (1) In contests where the rights of successful parties have been established.
- (2) Where examinations have been made by Government agents and no fraud appears.
- (3) Homestead entries where evidence of residence, improvements, and cultivation have been established according to law.

And a board to consist of the Assistant Commissioner, chief clerk, and chief law clerk, is hereby organized to pass upon and report said cases to the Commissioner.

WM. A. J. SPARKS,
Commissioner.

The foregoing order, while professing to be a modification of the former order of suspension, imposed additional methods of delay and seriously increased the difficulties of the settler.

It must be conceded that in all the cases enumerated in the foregoing

order the law absolutely entitled the claimant to his patent in due course of business without any additional condition or intervening obstacles being imposed. A claimant could show no higher right to a patent for his land than that established by a successful contest. This was some time before the present Division of Contests (H) was organized, and when all contests were primarily decided by trusted examiners to whom the duty was assigned and ultimately determined by the Commissioner, or, upon appeal, by the Secretary of the Interior. Yet, as will be seen, the claimant's rights in many cases, after years of vexatious delay and after being so established, was subject to still further hindrance of an examination before a special board, organized outside of any legal provision for its existence, before which the final decisions of the highest tribunal known to the department were to be reviewed and passed upon as to their true import and effect before the entries could be put into actual course of patenting.

Even after the claimant, by report of a government agent, had been exonerated from all suspicion of fraud, his case was subject to the additional delay of an examination by this special board before the Commissioner would request the issuing of a patent thereon.

In view of this attempted suspension of proceedings called for under the laws of Congress, and the complete paralysis existing in the General Land Office by reason of these unauthorized and obstructive measures, Secretary Lamar, evidently realizing the gravity of the situation, on April 6, 1886, issued to Commissioner Sparks the following order:

On the 3d of April, 1885, (12 L. O., 18,) you issued the following order [here the Secretary recites the Commissioner's order of April 3, 1885, as hereinbefore given].

Whatever necessity may have existed at the time of its promulgation has ceased to be sufficient to longer continue an order suspending all action, and involving in a common condemnation the innocent and guilty, the honest and dishonest. While I earnestly urge the exercise of the strictest vigilance to prevent, by all the agencies in your power, the consummation of fraudulent or wrongful land claims, yet, when the vigilance of all the agencies show no substantial evidence of fraud or wrong, honest claims should not be delayed or their consideration refused on general report or rumors.

The above order, as issued by you, is therefore revoked, and you will proceed in the regular orderly and lawful consideration of the claims suspended by it.

The foregoing order of the honorable Secretary unlocked an enormous amount of business that had been accumulating for more than an entire year in the General Land Office, relieved the settlers on the public domain from the consequences of a sweeping condemnation made without just cause, and was hailed with general satisfaction.

Following this order of revocation, however, another order, apparently conceived by the same spirit of procrastination, was issued by the Commissioner, dated November 29, 1886, which practically accomplished the same dilatory purpose as its predecessor, before adverted to, as follows:

DEPARTMENT OF THE INTERIOR,
General Land Office, November 29, 1886.

Order.]

It having become necessary for the efficient and proper dispatch of the business of this office to formally and permanently organize a division in the nature of a Board of Review for the examination of final-proof cases under the pre-emption, homestead, timber-culture, and desert-land laws, the same is hereby organized and designated as Division O, and by that initial to be recognized by the chiefs and employes of this office, and the chief clerk of the office, by and with the consent and approval of the Commissioner, will designate the clerks to serve in said division, and a temporary chief for the same until a permanent chief thereof shall be duly appointed and qualified.

Approved:

L. Q. C. LAMAR,
Secretary.

WM. A. J. SPARKS,
Commissioner.

This order entirely changed the uniform custom that had prevailed in the General Land Office in the examination and disposal of cases ever since its organization in 1812, and, as the result has shown, introduced an unbusiness-like and dilatory adjunct to the working machinery of the office.

In the Public Lands Division, to which all agricultural entries primarily go, each homestead, timber-culture, and desert-land case, in its proper order, is assigned to an experienced and competent clerk, who examines all proof submitted, and, if it be found that the entryman has made a substantial compliance with the laws of Congress and the regulations of the department in good faith, the case is marked "approved" and sent to the Recorder's Division for patenting, where the patent is written up, recorded, and transmitted to the patentee in its order. If the proofs are found defective in any material respect the case is suspended until, by correspondence with the local land office, the defect can be cured by additional proof or other proceedings had when necessary.

The practice of the office now is, and always should have been, not to cancel an entry or hold it in suspension upon merely technical grounds, or upon mere suspicion of fraud, but to determine every case upon its real merits in a spirit liberal to the extent of the law, the bona fides of the settler being presumed unless evidence to the contrary appears. If it be a pre-emption case, after being posted in the Public Lands Division, it is sent to the Pre-emption Division, where it goes through a similar process, and if approved is forwarded to the Recorder's Division, to be disposed of by patent in the usual course. In this way, and under this mode of procedure, cases formerly were and are now disposed of in this office with reasonable promptitude.

During the existence of the Board of Review, however, all homestead, pre-emption, desert-land, and timber-culture cases, it will be observed, after being examined as before stated, were sent to that division and assigned to a clerk for examination *de novo*. The clerk who took the case was often inexperienced in the business, and not specially qualified in other respects for the task.

It sometimes happened that the case was given to some young female clerk to make examinations requiring the exercise of legal knowledge and experienced judgment in deducing the real facts from a mass of conflicting evidence submitted for review.

It is part of the history of this office that by some of these clerks, in reaching their conclusions, the decisions made by the Secretary of the Interior in parallel cases, and in some instances the opinion of the Supreme Court of the United States, have been overlooked or disregarded. Their conclusion upon the salient points involved in the examination were noted upon a sheet of paper, or tablet, containing a large number of cases, and submitted to the Commissioner for his inspection. Necessarily, the examination by the Commissioner was a perfunctory and imperfect one, as he could not himself review the evidence in so many cases, and was compelled to rely upon the facts found therein by his clerks.

By this exceedingly superficial process the decisions of competent clerks in the Public Lands and pre-emption divisions were often set aside by the precarious decisions of these reviewing clerks, many of whom, it may in moderation be said, were not specially competent for the work they undertook to perform.

But said Board of Review did answer what would appear to have been a specific and defined purpose, namely, that of greatly hindering

the determination of cases, causing their indefinite pendency in the General Land Office.

On the 1st of June last, when I entered upon my present duties, regarding this Board of Review as unnecessary and obstructive to the due course of business, and acting under your instructions, I determined to dispense with the incumbrance at the earliest day practicable. I found that on that day there was an accumulation of between 17,000 and 18,000 cases in that division awaiting examination, but I succeeded in so reorganizing its mode of doing business that by the 6th day of July following the entire mass of pending cases was fully disposed of, and I thereupon, with your approval, issued the following order:

DEPARTMENT OF THE INTERIOR,
General Land Office, July 6, 1889.

Order.)

Division O of this office will be discontinued this day, and the work heretofore done in said division will be performed in the division to which the same primarily belonged, as directed by the order of June 3, 1889.

WM. M. STONE,
Acting Commissioner.

Approved:

JOHN W. NOBLE,
Secretary.

In order to illustrate the benefits already derived from the foregoing and other changes in the working methods of the office, I submit the following statements by way of comparison.

The annual reports made by former Commissioners show the total number of patents issued for agricultural lands during the years named, as follows:

Fiscal year ending June 30, 1886	19,885
Fiscal year ending June 30, 1887	24,558
Fiscal year ending June 30, 1888	47,180
Total for three years	91,623

Averaging 30,541 per year, or an average of 2,545 per month.

The total number of agricultural patents issued for the fiscal year ending June 30, 1889, is 70,141. During the first eleven months of that year, under the former methods of work, there were issued of said total 53,618 patents, being a monthly average of 4,874, while during the month of June of said year, under the new methods, there were issued 16,523 patents, a most gratifying increase over the former management. To still further illustrate the successful workings of the office under present management, it may be proper to state that notwithstanding the reduction of clerical force during the months of July and August of the present year, by leaves of absence to which the clerks are entitled, sickness, and other causes usually occurring and unavoidable in these months of the year, agricultural patents were issued as follows: July, 7,423; August, 9,480. Adding to these the issue of June last, as above given, 16,523, we have the total for three months of 33,426, or an average of 11,142 per month. This product will be largely increased by the return to duty of clerks heretofore absent.

The reason which actuated the former Commissioner in resorting to the extreme measures of suspension and delay, heretofore spoken of, may probably be found in the fact of his unwarranted and unfortunate suspicion that a wide-spread system of fraud prevailed among claimants on the public domain, requiring prompt and heroic remedy. It is eminently proper in this connection that his own language be quoted.

In his report for the fiscal year ended June 30, 1885, criticising the pre-emption laws, page 70, the Commissioner says:

The proportion of fraudulent filings to the total number of filings made and relinquished may be estimated in round numbers at exactly 100 per cent. The pre-emption system serves the speculative interest, the timber interest, the cattle interest, the coal-mining interest, and the water-controlling interest, all at the cost or to the exclusion of actual settlers, according as the purpose of its use is speculation or monopoly.

In discussing the subject of commuted homesteads, page 71, the Commissioner says:

The proportion of fraudulent entries of this kind can be more nearly estimated at the whole number of such entries than in any other manner.

Speaking of the "five-year homesteads" he says:

The average proportion of fraudulent entries made for five-years' settlement is estimated at about 40 per cent.

On page 73, in regard to the timber-culture law, he says:

The proportion of totally fraudulent entries under this act is estimated at 90 per cent.

On page 48 of said report the Commissioner says:

At the outset of my administration I was confronted with overwhelming evidences that the public domain was being made a prey of unscrupulous speculation and the worst forms of land monopoly through systematic fraud carried on and consummated under the public land laws.

This wholesale arraignment of claimants on the public domain should not have been made without the most conclusive evidence to sustain it. It contains in express terms, without discrimination and without exception, a charge of the gravest character against these hardy and courageous pioneers of our advancing civilization well calculated to challenge the credulity of the lowest order of American intellect.

This astounding condition of things, as viewed from the standpoint of the honorable Commissioner, may or may not have existed during his administration, but it affords me infinite pleasure to inform you that during my more than four months of intimate connection with the duties of this office I have found no evidence of general misconduct on the part of our western settlers, and have failed to discover any general system of fraud prevailing upon the government in reference to the public domain. Instances of attempted fraud are to be expected, but justice requires me to say that they are exceedingly rare and notably exceptional. I speak now of the individual settler.

That fraudulent filings under the different acts of Congress have been made and may hereafter be made it is unnecessary to deny, but, so far as I am advised, such cases are confined to organizations, corporate and others, operating in the interest of aggregated capital. Special agents appointed by authority of Congress have been so instructed and located under your administration that these embryo frauds, it is believed, will be vigilantly watched, detected, and successfully thwarted.

REPORT OF THE BUSINESS DONE IN THE GENERAL LAND OFFICE DURING THE YEAR 1869.

AGRICULTURAL PATENTS ISSUED.

During the year there were issued, for lands classed as agricultural, 70,141 patents, being an increase of 22,961 over the number issued the year preceding, and an increase of 45,583 over the year ending June 30, 1887.

These patents were on the following classes of entries and within the States and Territories designated, to wit:

Detailed report of agricultural patents issued during the fiscal year ending June 30, 1889.

States and Territories.	Final homestead.	Commuted homestead.	Pre-emption cash.	Timber culture.	Desert.	Warrant and scrip location.	Private cash.	Graduation cash.	Act of June 15, 1880; cash.	Cash.	Miscellaneous cash.	Townsites.	Total.
Alabama	471	17	5			1	1,041	1	8	23			1,567
Arkansas	2,745	14	23			9	775	6	9	15			3,595
Arizona	3	18	19		1	1				4		1	47
California	1,414	271	981	2	41	12	111		46	151	1,283	2	4,314
Colorado	232	358	1,032			4	82		11	513			2,333
Dakota	5,872	3,465	6,670	42		219			117	421		1	16,807
Florida	1,326	143	70			82	135		36	5			1,797
Illinois										2			2
Iowa	29	3		30		6				12			89
Idaho	533	124	439		97				1	8			1,202
Kansas	3,692	3,270	1,255	47		16	4	133	604	2,517	3		11,741
Louisiana	353					193	374	3		5			928
Michigan	785	49	8			165	1,456	4		323			2,790
Minnesota	1,937	265	776	10		29	1,023	16		346		1	4,403
Mississippi	1,355	8				1	547	16	3				1,930
Missouri	1,294	48	6			4	246	3	4	7			1,612
Montana	541	72	237		292	1		1	63				1,207
Nebraska	1,990	984	1,447	16		10	25	47	983	62	1		5,563
Nevada	3				9								12
New Mexico	91	28	108		9	8				38		2	284
Ohio					31								31
Oregon	870	130	418		23	4	7	2	128	160			1,742
Utah	225	19	52		66	3		31	32		2		430
Washington Ter	1,137	195	657		1	4		3	424	210			2,635
Wisconsin	937	69	62			5	1,676	15	9				2,773
Washington, D. C.	2	1							3		1		7
Wyoming	20	11	108		251	13		4	2				409
Total	27,857	9,562	14,372	147	790	821	7,504	10	507	4,324	4,233	14	70,141

From the foregoing it will appear that title has been passed from the United States to 11,791,110.07 acres of land as compared with 8,605,194.29 acres for the preceding year. The following table will show the quantity of land patented or certified to parties, by States and Territories, for that year and the year ending June 30, 1889:

States and Territories.	1888.	1889.	States and Territories.	1888.	1889.
	<i>Acres.</i>	<i>Acres.</i>		<i>Acres.</i>	<i>Acres.</i>
Alabama	286,776.16	289,520.64	Mississippi	68,960.00	309,119.56
Arkansas	234,930.67	716,236.21	Missouri	167,554.99	257,920.00
Arizona		7,520.00	Montana	107,377.58	239,040.27
California	172,509.46	700,760.06	Nebraska	563,172.90	890,251.40
Colorado	214,465.45	369,768.91	Nevada	83,417.04	1,920.00
Dakota	2,669,718.50	2,812,336.93	New Mexico	40,760.00	46,176.46
Florida	133,084.53	302,093.06	Ohio	320.00	4,960.00
Idaho	82,720.00	192,960.00	Oregon	268,024.83	368,106.64
Illinois	200.00	320.00	Utah	52,640.00	68,840.70
Indiana	160.00	119.44	Washington Ter	245,096.24	424,297.41
Iowa	7,280.00	15,161.93	Wisconsin	694,551.92	448,425.91
Kansas	1,400,235.21	1,878,560.00	Wyoming	43,446.50	67,158.19
Louisiana	160,059.73	171,726.29	Washington, D. C.		1,120.00
Michigan	64,133.01	455,836.32			
Minnesota	888,019.57	750,854.74	Total	8,605,194.29	11,791,110.07

A net increase in 1889 over 1888 of 3,185,915.78 acres.

MINERAL PATENTS.

There were also 913 patents for mineral lands and 153 coal patents issued. The coal patents covered 17,096.80 acres.

The mineral and coal patents were issued in the following States and Territories:

States and Territories.	Coal lands.	Acres.	Mineral and mill-site.
	<i>Number.</i>		<i>Number.</i>
Alaska.....			9
Arizona.....			17
California.....			72
Colorado.....	74	12,488.91	569
Dakota.....			21
Idaho.....			15
Montana.....	7	692.57	93
Nevada.....			8
New Mexico.....	7	736.46	23
Oregon.....			2
Utah.....	1	40.70	69
Washington.....	9	1,418.97	
Wyoming.....	57	1,718.19	15
Total.....	155	17,096.80	913

RAILROAD LANDS PATENTED.

There were patented or certified, under the law, for the benefit of railroad companies, 425,046.02 acres, as shown by the following table:

States.	Acres.
Arkansas.....	2,073.47
California.....	2,646.69
Iowa.....	440.89
Minnesota.....	396,721.26
Missouri.....	40.00
Wisconsin.....	23,123.71
Total.....	425,046.02

SWAMP-LAND PATENTS.

Two hundred and fifty-nine thousand seven hundred and twenty-one and forty-five one-hundredth acres were patented to the States under the swamp-land grants, as follows:

States.	During year ending June 30, 1889.	Total patents since date of grant.
	<i>Acres.</i>	<i>Acres.</i>
Alabama.....		410,189.84
Arkansas.....	140,870.21	7,644,226.34
California.....		1,465,397.35
Florida.....	711.59	16,061,120.98
Illinois.....		1,455,601.45
Indiana.....	119.44	1,257,863.05
Iowa.....	1,356.97	1,183,235.20
Louisiana, act of 1849.....	210.50	8,708,588.53
Louisiana, act of 1850.....		225,172.32
Michigan.....		5,667,304.64
Minnesota.....	44,182.38	2,890,507.26
Mississippi.....		3,258,746.66
Missouri.....		3,411,548.99
Ohio.....		25,640.71
Oregon.....	72,270.36	1,104,897.58
Wisconsin.....		3,329,922.64
Total.....	259,721.45	57,099,972.54

STATE SELECTIONS APPROVED.

During the year 132,350.61 acres were approved under various grants to the several States under educational grants, as follows:

States.	School indemnity.	Internal improvement.	University.	Total.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Alabama.....	35,555.17			35,555.17
California.....	10,529.06			10,529.06
Florida.....	351.16			351.16
Louisiana.....	18,168.73	4,556.43		22,725.16
Minnesota.....	2,115.36			2,115.36
Montana.....			45,226.70	45,226.70
Oregon.....	15,388.50		459.50	15,848.00
Total.....	82,107.98	4,556.43	45,686.20	132,350.61

INDIAN AND MISCELLANEOUS PATENTS ISSUED..

One hundred and fifty-nine thousand three hundred and ninety and twenty-one one-hundredths acres were patented during the year on private land claims, donations, Indian claims in severalty, and scrip locations, which patented lands fall within the States and Territories named below:

States and Territories.	Acres.	States and Territories.	Acres.
Dakota.....	123,216.93	Louisiana.....	310.63
Florida.....	13,510.31	Nebraska.....	171.40
Wisconsin.....	4,745.91	Michigan.....	9,435.32
Alabama.....	3,245.47	Iowa.....	1,004.96
Oregon.....	1,268.28	Minnesota.....	77.00
Washington.....	1,278.44	Arkansas.....	166.00
Mississippi.....	319.56		
Idaho.....	640.00	Total.....	159,390.21

The following table will show at a glance the numbers and kinds of entries of all kinds made during the fiscal year ending June 30, 1889, together with the cash receipts for the same, compared with the similar statement for the fiscal year ending June 30, 1888.

*Number and class of final and original entries and selections made during the year ending
with year ending*

Class of entry.	No. of entries.	No. of acres.	Cash receipts.	
			Sales.	Fees and commissions.
FINAL ENTRIES.				
Public sales	8	203.60	\$452.41	
Private entry	1,715	156,272.85	233,052.84	
Pre-emption	19,586	2,902,028.15	3,905,593.75	
Timber and stone	2,361	334,519.88	836,306.10	
Coal	186	23,828.23	500,940.20	
Mineral	1,304	34,988.58	129,985.70	
Town sites	6	1,409.92	2,071.48	
Town lots	66		1,474.70	
Abandoned military reservations	9	377.74	2,735.00	
Indian lands	906	117,342.30	389,524.72	
Desert lands	644	187,059.78	189,851.05	
Commuted homesteads	10,030	1,521,537.10	2,054,786.36	
Act June 15, 1880	64	6,659.79	8,211.31	
Military bounty-land warrants	164	19,483.20		\$570.00
Private land scrip	153	16,842.34		105.00
Valentine scrip	7	313.30		10.00
Sioux half-breed scrip	3	217.80		
Donation claims	8	2,058.05		65.00
Indian allotments	108	10,580.81		
Homesteads (final)	25,549	3,681,708.80		129,296.23
Timber culture (final)	516	66,159.93		2,064.00
Total	63,393	9,083,592.15	8,254,985.62	132,110.23
ORIGINAL ENTRIES.				
Desert land	1,341	408,809.96	124,424.78	
Timber culture	16,945	2,551,069.22		230,678.00
Homesteads	42,183	6,029,230.26		604,675.58
Total	60,469	8,989,109.44	124,424.78	835,353.58
RAILROAD AND OTHER SELECTIONS.				
Railroad		2,211,848.99		27,263.95
Swamp		2,010,072.03		
Swamp indemnity		7,039.24		91.00
Educational, etc.		283,609.84		3,737.15
Total		4,514,570.10		31,092.10
RECAPITULATION BY TOTALS.				
Final entries	63,393	9,083,592.15	8,254,985.62	132,110.23
Original entries	60,469	8,989,109.44	124,424.78	835,353.58
Railroad and other selections		4,514,570.10		31,092.10
Total	123,862	22,592,271.69	8,379,410.40	998,555.91
Deduct total of increase				
Net total decrease				
Net decrease in final entries				

June 30, 1889; also amount of cash receipts for same, and increase or decrease as compared June 30, 1888.

Increase as compared with 1888.				Decrease as compared with 1888.			
No. of entries.	No. of acres.	Cash sales.	Fees and commissions.	No. of entries.	No. of acres.	Cash sales.	Fees and commissions.
				1	245.25	\$11,072.46	
				6,603	1,301,227.71	1,709,359.31	
				3,565	561,278.50	705,867.26	
				50	7,448.73	18,627.59	
34	7,181.28	\$158,690.80		10			
	3,254.02	11,988.85		582		34,127.21	
1	756.82	1,253.10		3	269.14		
		1,225.60		1,734	207,766.79	421,589.05	
23	1,911.35	4,336.86		4,027	616,451.72	890,119.05	
				87	7,929.19	19,141.45	
			\$60.00	34	501.80		\$67.00
4	199.55		7.00	191	7,985.59		
2	305.19		.10	4	701.95		
97	8,995.81						
3,136	506,303.16		20,096.53	468	68,256.19		1,872.00
3,297	528,912.18	176,957.31	20,163.63	17,368	2,780,002.56	3,720,903.48	1,939.00
				423	163,846.12	71,608.93	
				7,527	1,184,235.88		104,041.00
				4,053	647,385.67		75,754.34
				12,003	1,995,467.67	71,608.93	179,795.34
					4,313,451.10		54,324.08
					2,228,214.44		
					5,252.98		70.40
					185,792.17		2,197.65
					6,732,710.69		56,592.13
3,297	528,912.18	176,957.31	20,163.63	*17,368	*2,780,002.56	3,720,903.48	1,939.00
				12,003	1,995,467.67	71,608.93	179,795.34
					6,732,710.69		56,592.13
3,297	528,912.18	176,957.31	20,163.63	29,371	11,508,180.92	3,792,512.41	238,326.47
				3,297	528,912.18	176,957.31	20,163.63
				26,074	10,979,268.74	3,615,555.10	218,162.84

*Net decrease in final entries: In number 14,071; in acres, 2,251,090.38.

Besides the business represented by the foregoing table there were made the following filings and protests, not included as entries, nor were the filing fees included therein:

Kind of filing.	Number of filings.	Fees.
Pre-emption	34, 194	\$87, 191
Homestead	1, 164	2, 585
Coal	1, 821	5, 408
Valentine scrip	1	1
Lassen County desert.	277	831
Mineral applications	1, 491	14, 910
Timber and stone applications	2, 358	23, 580
Town lot	2	6
Totals	41, 308	134, 512
Add to this mineral protests	245	2, 450
Total filing fees	41, 553	136, 962

In his annual report for the year ending June 30, 1888, my immediate predecessor showed that there were then pending in this office 238,156 final entries awaiting examination for patents. It also appears from said report that there were 77,468 such entries made during that year.

The foregoing tables show that the entries patented within the classes mentioned in the table of final entries reached 70,141. There were at the close of the year in the Recorder's Division, ready for patent, 4,551 entries, having passed the examination required and been approved. These have since been patented. Besides these cases several thousand have either been disposed of by reference for approval to the Board of Equitable Adjudication, or have been canceled in due course of business by reason of illegality, failure to comply with the law, or other cause. The number of final entries disposed of, therefore, during the year, reached fully 80,000.

BUSINESS REMAINING UNDISPOSED OF JUNE 30, 1889.

By reason of changes in methods of making examinations which I have adopted since I took charge of the office, and by leaving off work which to me seemed wholly unnecessary, which changes have already been referred to, I confidently expect to accomplish much more during the current fiscal year than was done last year.

The following table will exhibit the number and kinds of final entries, by States and Territories, undisposed of at the close of the year:

Final entries, by classes, for each State and Territory, pending in the General Land Office June 30, 1889.

States.	Homesteads.				Cash.				
	Final.	Com-mitted.	Indian.	Soldier's.	Pre-emption.	Private.	Grada-uation.	Indian.	Other.
Alabama	4,440	313		1	173	157	1,966		10
Arizona	171	53		23	169				
Arkansas	3,244	96		23	482	1,280	2,208		7
California	2,759	1,582		160	7,025	17			2
Colorado	950	1,462		40	11,810	78		17	
Dakota	5,219	3,067		45	16,370			2	
Florida	987	264		1	249	268	258		16
Idaho	307	98		3	695				
Indiana					1				
Iowa	34	17		3	45	4			1
Kansas	3,815	9,873		15	18,883			1,017	*109
Louisiana	705	43			34	3,365	530		4
Michigan	397	108		23	115	378	40		
Minnesota	2,716	456	22	125	1,939	1,208		3	
Mississippi	611	88			13	2,587	343		3
Missouri	515	17		14	46	240	875		4
Montana	186	61		2	1,646	3			
Nebraska	5,285	4,644	14	18	14,515			595	
Nevada	62	1		1	4				
New Mexico	904	101		78	1,739	106			
Oregon	955	170		9	2,975	75			
Utah	383	70		3	377				
Washington	1,434	232		77	2,570	37			7
Wisconsin	486	112	2	26	306	219	15		
Wyoming	305	98		51	1,143				
Total	36,375	22,998	38	741	83,324	10,124	6,235	1,633	163

* Osage ceded entries not included in last report.

Final entries, by classes, for each State and Territory, pending, etc.—Continued.

States.	Act of June 15, 1880.	Warrant and scrip locations.	Timber culture.	Timber and stone.	Desert.	Mineral.	Coal.	Donation.	Townsite.	Miscellaneous.	Total of all classes.
Alaska						13					13
Alabama	86	20					2				7,168
Arizona			4		101	152					673
Arkansas	7	19				4					7,370
California	6	54	3	3,634	117	701	9			21	16,120
Colorado	11	3	19			2,692	243		2	40	17,347
Dakota	36	18	770		1	150					25,678
Florida	41	279								2,966	4,426
Idaho			13		123	200					1,439
Illinois		1									1
Indiana											1
Iowa	3	10	42								159
Kansas	26	29	579								33,846
Louisiana	31	82									4,694
Michigan	12	119									1,192
Minnesota		79	323							6	6,876
Mississippi	3	1									3,649
Missouri	2	5									1,718
Montana		4	5		291	640	37				2,875
Nebraska	1	42	672								25,788
Nevada		1			59	195					323
New Mexico			3		89	125	17				3,162
Oregon	1	3	51	288	82	66	10	1		10	4,696
Utah		5	4	1	159	430	77				1,509
Washington	47	3	46	1,258	28	42	108			14	5,897
Wisconsin	67									136	1,372
Wyoming					742	37	50				2,426
Total	380	779	2,534	5,181	1,817	5,447	553	1	2	2,293	180,618

A discrepancy exists between the foregoing statement and the similar statement made in the report for the fiscal year ending June 30, 1888, in the item of pre-emption entries, owing to the fact that in reporting the number of Osage cash entries (included among pre-emption entries) on last year's report, the giving to the receipt for each payment on an Osage entry a separate number, as though it was a separate entry, led to an error by which the number of Osage entries was stated as 40,200, when in reality there were at the close of the last fiscal year but about 20,000 such entries pending.

ORIGINAL ENTRIES PENDING.

The following table shows the number, by States and Territories, of original homestead, timber-culture, and desert-land entries pending at the close of the year:

Original entries, by classes, for each State and Territory, pending in the General Land Office June 30, 1889.

	Home- steads.	Timber culture.	Pre-emption de- claratory state- ment.	Desert.	Coal de- claratory state- ment.	Total.
Alabama.....	12,838					12,838
Arizona.....	969	637	10	963		2,579
Arkansas.....	15,598	20	4			15,622
California.....	16,664	3,244	24	1,511		21,543
Colorado.....	13,810	21,103	25		1	34,939
Dakota.....	30,427	35,831	7	29		66,294
Florida.....	7,418	3	2			7,423
Idaho.....	3,122	1,617	7	816		5,592
Illinois.....	1					1
Iowa.....	1,029	436				1,465
Kansas.....	21,763	21,628	23	1		43,425
Louisiana.....	7,817	288	2			8,107
Michigan.....	2,330		1			2,331
Minnesota.....	10,219	3,809	3			14,031
Mississippi.....	4,101					4,101
Missouri.....	10,750					10,750
Montana.....	2,315	1,638	7	828		4,788
Nebraska.....	25,533	26,044	19			51,696
Nevada.....	141	20		12		173
New Mexico.....	1,879	883	32	514		3,308
Oklahoma.....	918					918
Oregon.....	7,120	4,406	12	222		11,760
Utah Territory.....	1,788	1,052	1	1,335	51	4,227
Washington Territory.....	11,984	3,837	7	118	4	15,950
Wisconsin.....	5,359	2	1			5,362
Wyoming Territory.....	1,698	1,983		1,180		4,861
Total.....	217,591	123,591	187	7,559	56	353,984

MISCELLANEOUS SELECTIONS AND CLAIMS PENDING.

RAILROADS.

Railroad selections amounting to 29,444,251.64 acres were pending at the close of the year, an increase over the amount pending at the beginning of the year of 4,014,385.53 acres. There were also Oregon wagon-road selections pending to the amount of 304,926.67 acres. In appendix F will be found a detailed statement of these selections and the companies for whose benefit they are made.

SWAMP SELECTIONS.

There were selections pending by the various States under the swamp-land grants amounting to over 2,000,000 acres.

EDUCATIONAL AND INTERNAL IMPROVEMENT GRANTS.

There were pending at the beginning of the year 12,400 lists of selections, embracing a total of 1,795,521.60 acres, by the States, for educational and internal improvement purposes. During the year 2,780 lists, embracing 335,007.68 acres, were received, making an aggregate on hand at beginning of year and received during the year of 15,180 lists, embracing an aggregate of 2,130,529.28 acres. Of these 799 lists were disposed of, leaving pending at the close of year 14,381 lists, embracing 1,978,472.88 acres.

This matter will be found in detail in the table in appendix K.

Cash receipts.

From cash sales.....	\$8,018,254.50
homestead fees and commissions.....	733,972.81
timber-culture fees and commissions.....	232,742.00
military bounty-land warrant locations.....	570.00
fees on scrip locations.....	115.00
fees on pre-emption and other filings.....	136,962.00
fees for reducing testimony to writing, etc.....	116,452.32
fees on donation claims.....	65.00
fees on State selections.....	3,524.66
fees on railroad selections.....	27,263.95
fees on wagon-road selections.....	303.49
Total receipts from public lands.....	9,270,225.73
Receipts from disposal of Indian lands.....	380,524.72
timber depredations.....	16,048.30
fees for transcripts of records furnished.....	10,102.59
Total.....	9,685,901.34

From the foregoing statement it will appear that there was a decrease in the total receipts as compared with the preceding year of \$3,861,236.08. This decrease was due mainly to the falling off in cash entries, the decrease in this item alone being \$3,184,817.45.

* * * * *

RAILROADS.

ADJUSTMENTS UNDER ACT OF MARCH 3, 1887.

The act of March 3, 1887, authorizes and directs the Secretary of the Interior to immediately adjust, in accordance with the decisions of the Supreme Court, each of the railroad grants made by Congress, and if upon the adjustment, or sooner, it should appear that lands have been erroneously certified or patented by the United States to or for the use of such company, it shall be the duty of the Secretary of the Interior thereupon to demand a reconveyance to the United States of such lands, and if the company shall fail to reconvey the lands within ninety days it shall be the duty of the Attorney-General to commence and prosecute in the proper courts the necessary proceedings to cancel all such patents.

This act also provides for the reinstatement of the homestead and pre-emption of any bona fide settler erroneously canceled on account of any railroad grant or the withdrawal of public lands from market.

The adjustments are proceeding as rapidly as possible, but necessarily slow, due to the deficiency in clerical force and the delay in determination of questions pending before the department necessary for a proper adjustment.

Of pending selections 21,660,846.88 acres have been suspended, awaiting the result of certain proposed legislation looking to the forfeiture of the lands granted opposite the portions of the roads not completed within the time limited by the granting acts. This policy has been followed in this office for about seven years.

Upon the adjournment of the last Congress, without passing any of these bills, my predecessor, Mr. Stockslager, submitted the question to you as to whether he should continue the same policy with regard to these lands, or should proceed to adjust the claims of the companies thereto. By your indorsement, dated March 25, 1889, you directed him to continue the same policy "until further orders," which you afterwards renewed to me orally, and which I have followed.

The question of whether these lands shall be forfeited or not rests entirely with Congress under the rulings of the United States Supreme Court. It is highly important, however, that some definite action be taken in the premises in order that the titles to these large areas of public lands may be finally settled.

Three classes of parties are interested, as well as the government. They are:

(1) The granted railroad companies, which are asking that patents issue to them promptly.

(2) Citizens of the various States and Territories who have purchased lands from the railroad companies, relying in good faith upon the grants of the government, and who are naturally anxious that their titles be confirmed by the issuance of patents to the companies.

(3) Settlers who, on the strength of proposed forfeitures of these grants, have settled on unoccupied railroad lands, in anticipation of their restoration to the public domain, for the purpose of taking them under the homestead and pre-emption laws.

In justice to these three classes of claimants it would seem proper to urge the Fifty-first Congress to reach some solution of the problem. If, by joint resolution, some expression of legislative opinion could be given as to whether action should be taken or not in this office on selections now pending, it would serve as a guide to the executive branch of the government. No executive officer feels like taking the responsibility of adjusting these selections and passing title beyond the reach of forfeiture bills while such bills are pending and under discussion in Congress. However well-meaning or disinterested his action might be it would subject him and the administration of which he might be a part to the charge of so far favoring railroad companies that had not complied with the letter of the law as to give them the lands they claim in the face of proceedings in Congress to enforce the provisions of the law. I believe that Congress has so far failed to pass any act declaring a forfeiture of any part of granted lands coterminous with completed portions of the road, although the same may have been completed out of time.

This is, by many, claimed to be an indication that it is not the legislative policy of the government to insist on a forfeiture of these grants when the companies in good faith build their roads, even though out of time. This is a matter of such magnitude, and is so important to the interests of the people living along the lines of land-grant roads, that it will doubtless enlist the attention of the Fifty-first Congress at an early period.

In connection with the discussion of the question of a forfeiture of lands opposite portions of roads built out of time I desire to call attention to another phase of the forfeiture question about which, it seems to me, there should be no difference of opinion. I refer to such portions

of land-grants as are coterminous with these portions of roads still uncompleted. Fully 5,000,000 acres of land might be restored to the public domain by the immediate declaration of such forfeitures. The growing scarcity of public lands and the increasing pressure of population upon the diminishing domain of the government indicate that it would be the part of wise statesmanship to provide for the needs of the people as far as possible. It would seem that these roads have had all the indulgence which justice or fair dealing would demand.

FORFEITURE OF MICHIGAN GRANTS.

During the past year Congress, by act of March 2, 1889, resumed the title to all lands heretofore granted to the State of Michigan by virtue of an act entitled "An act making a grant of alternate sections of the public lands to the State of Michigan, to aid in the construction of certain railroads in said State, and for other purposes," which took effect June 3, 1856, which are opposite to and coterminous with the uncompleted portion of any railroad, to aid in the construction of which said lands were granted or applied, and all such lands were declared to be a part of the public domain. Pursuant to said act, the following instructions were given to the local officers:

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., March 13, 1889.

REGISTER AND RECEIVER,
Marquette, Michigan:

GENTLEMEN: I inclose herewith a copy of public act No. 157, entitled "An act to forfeit lands granted to the State of Michigan to aid in the construction of a railroad from Marquette to Ontonagon, in said State."

In view of said act you are directed to give notice, by publication for at least thirty days, that the lands forfeited by said act have been restored, and that the books of your office are open for entry of the same at \$1.25 per acre under the pre-emption, homestead, and other laws relating to unoffered lands.

For the purpose of designating the limits within which lands may be effected by said act I have caused a diagram (copy herewith) to be prepared, showing the limits of the withdrawals for the Marquette, Houghton and Ontonagon and the Ontonagon and Brulé River railroads, in the State of Michigan, and have fixed and designated thereon the terminal limits of the completed portion of said roads, as shown by certificates of the governor of said State on file in this office. The terminal limit of the Marquette, Houghton and Ontonagon railroad is fixed in accordance with a certificate of the governor of Michigan (now in the archives of this office), dated February 6, 1873, to the effect that said road has been constructed to L'Anse, Mich., and the terminal limit of the Ontonagon and Brulé River railroad is fixed in accordance with the certificate of the governor of the State of Michigan (now on file in this office), bearing date February, 24, 1882, which certifies that said road has been completed for a distance of 20 miles, "extending from the shore of Lake Superior * * * to a point in section 10, of township 50 north, of range 33 west." The tracts colored yellow on the diagram referred to represent the lands withdrawn for said companies, but which lie opposite to and coterminous with the uncompleted portions of said road (in accordance with the terminal limits fixed as aforesaid), and which, according to the terms of the act, are thereby forfeited, subject to certain provisions.

In order that the provisions of the act may be carried into effect in the disposition of the lands referred to, you are instructed that all entries or pre-emption filings for said lands must be allowed subject to the right of way or depot grounds of any railroad heretofore granted through the lands embraced in such entries or filings; that when any of the lands forfeited have been heretofore disposed of by the proper officers of the United States, or under State selections, confirmed by the Secretary of the Interior, when the consideration paid therefor is still retained by the government, the right and title of the persons holding or claiming under such disposition is confirmed: Provided that where the original cash purchasers are the present owners their titles under such purchases should be confirmed only so far as the Secretary of the Interior shall be satisfied that they have purchased without fraud and in the belief that they were thereby obtaining valid titles from the United States; also provided that such cash

entries or sales, or any tract in such State selection, are not confirmed, upon which there were bona-fide pre-emption or homestead claims on the 1st of May, 1888, arising or asserted by actual occupation of the land under color of the laws of the United States.

Where such pre-emption and homestead claims exist they are confirmed by the act as against the cash entries. Where such cases arise (*i. e.*, conflicts between cash entrymen and parties claiming actual settlement May 1, 1888) you will call upon the settler to furnish satisfactory evidence, after due notice to the opposing party, that he was so claiming the land and was in actual occupation of the same on the date named. Such evidence should be transmitted to this office for consideration, together with your recommendation, but in no case will you admit the homestead or pre-emption entry prior to instructions from this office to do so, which will be given upon satisfactory evidence of settlement by the settler and the cancellation of the cash entry. You are instructed that under said act any persons who may have settled upon and are now in possession of any lands forfeited thereby, and who may desire to enter the same under the *homestead law*, shall be allowed, when making final proof, for the time they have already resided upon and cultivated the same.

You will acknowledge receipt hereof without delay, and at the proper time forward copies of the papers containing the notice hereby directed to be published.

Very respectfully,

S. M. STOCKSLAGER,
Commissioner

Approved:

JOHN W. NOBLE,
Secretary.

In all cases where there were bona fide settlers on these lands at date of forfeiture they were given the preference right of entering the tracts on which they had settled, not exceeding 160 acres each.

ONTONAGON AND BRULÉ RIVER RAILROAD GRANT.

In the order of March 13, 1889, under the forfeiting act of March 2, 1889, an exception was made as to 20 miles of the Ontonagon and Brulé River road, which that company claimed to have completed prior to February 24, 1882.

It having been charged before Congressional committees that said company had never constructed its road, as claimed, Mr. W. P. Jones, a reliable clerk, was detailed from this office (by order dated May 31, 1889, and approved by you June 3, 1889), to proceed to the upper peninsula of Michigan for the purpose of making an actual examination of said 20 miles of road.

Upon his report, dated July 20, 1889, you directed me by your letter of August 8, 1889, to "call upon the company to show cause within sixty days why the grant opposite to and coterminous with the last 8 miles of said section should not be declared forfeited and the land restored to entry under the act of March 2, 1889."

Accordingly, on August 15, 1889, I mailed the following notice to the secretary of said company:

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., August 15, 1889.

SIR: In the matter of the grant of public lands for the construction of a railroad from Ontonagon, in Michigan, to the Wisconsin State line, by the act of Congress of June 3, 1856 (11 Stats., 21), it appears that there were forfeited to the United States by the act of March 2, 1889 (25 Stats., 1008), all lands embraced in the said grant which are opposite to and coterminous with the unconstructed portion of the road. Official records show that a section of 20 miles is claimed to have been constructed lying between Ontonagon and Rockland, said State. That claim has been made the subject of investigation, as indicated in a communication to this office from the honorable Secretary of the Interior, dated the 8th instant, a copy of which is inclosed herewith for your information.

You will observe therefrom that in pursuance of such investigation I am directed by the Secretary to call upon your company to show cause, within sixty days, why

the grant opposite to and coterminous with the last 8 miles of said section should not be declared forfeited and the land restored to entry under the act of March 2, 1839. The purpose of this communication is to give such notice accordingly.

You will please acknowledge the receipt hereof.

Respectfully,

W. M. STONE,
Acting Commissioner.

E. MARINER, Esq.,

Secretary Ontonagon and Brulé River Railroad Company, Milwaukee, Wis.

Receipt of the notice was acknowledged by Mr. Mariner under date of August 22, 1889. Although these last proceedings were subsequent to the close of the fiscal year to which this report applies, I think the statement showing the complete history of this transaction is desirable.

* * * * *

SWAMP LAND GRANT.

Attention was called at full length in the annual report for last year to the fraudulent character of a large number of the claims for lands under the swamp-land grants.

Over 80,000,000 acres of land have been claimed by the States under these grants. The grants have not been extended by Congress to any States admitted to the Union since 1850 except Minnesota and Oregon, and in the natural course of events it would seem that all swamp claims should have been presented and adjusted before this time. Yet in the past year additional lists to the amount of 2,010,072.03 acres were filed in this office. The great bulk of these new lists embraced in one list from the State of Florida alone 1,962,080 acres.

In the report for 1888 (see p. 45) special mention was made of the frauds that had been perpetrated in regard to the claims of Florida under the swamp grant. There can be no doubt that large quantities of land, amounting to millions of acres, have been patented to this State erroneously as being swamp, when, in fact, they were and are good agricultural lands.

It would seem that before action is taken for the approval of current claims by this State the lands claimed should be carefully scrutinized and examined by reliable agents of the government in the field, and that some action should be provided for by Congress to recover for the public domain the lands fraudulently obtained before any more lands are patented under these grants. The total area of Florida is 37,931,520 acres, while the lists already filed from that State amount to 22,221,469 acres, of which amount 16,061,129.98 acres have been patented. Only 711.59 acres were patented to Florida during the past year. I call attention to the fact that no lists have yet been filed for lands in that part of the State most notoriously swampy in character, viz, in the extreme southern part of the peninsula, in the vicinity of the Everglades.

It is probable, therefore, that in the future several million acres more will be claimed of lands that may be more genuinely swampy than the bulk of those previously claimed.

It thus appears that fully two-thirds of the public lands in the State have been or will be claimed as swamp, a claim which I am not prepared to admit by any means.

Similar frauds on the government have been developed in some of the lists filed by the State of Minnesota. The chief of the swamp land division of this office is now in that State investigating a number of townships claimed to be swampy in character which are alleged to be fine timber and agricultural lands.

His report, when made, will be submitted to you.

MINERAL LANDS.

The work of examining *ex parte* mineral entries is in arrears about two and one-half years and in contest cases about two months.

Lists of railroad selections involving 5,561,207 acres remain suspended awaiting action by the department on the question as to whether the companies shall be required to furnish nonmineral affidavits or not. I can see no good reason why railroad companies should not comply with the same requirements as individuals, which is all that has been required by this office.

There are several thousand old mining applications, some dating back many years, for which no entries have been made. These lands are segregated from the public domain, but the government has received no money or other benefits from such segregation.

As a remedy for this I would repeat and indorse the recommendation made in last year's report. It would be to the advantage of the government and stimulate the mining industry, by encouraging bona fide claimants, to require these delinquent applicants to complete their proofs and pay for their claims within a specified time, or submit to forfeiture and cancellation.

There is another class of cases which I think should receive early attention as a class. I refer to the suspended entries. There are 2,129 entries in this class. Of these 10 were made prior to the act of May 10, 1872, and 200 were made prior to June 30, 1880. Of the 2,129 about 1,900 were suspended subsequent to June 30, 1881, and of the 1,900 over 1,400 were suspended between the dates June 30, 1885, and July 1, 1889.

If a re-examination of these suspended entries could be made I believe that many of them would be passed to patent upon the proofs already submitted under present rulings, and that the requirements made in many others might be justly and legally modified to such an extent that the claimants would readily respond.

But to make this re-examination *final*, which it should be, would require a regulation which would compel claimants to furnish within a reasonable time any additional proofs called for, or submit to the cancellation of their entries.

No such regulation exists, but I would recommend that one be made. I would make the regulation apply to original examinations also, for, in justice to the claimants and for the better protection of the government, mineral entries should be examined as expeditiously as possible upon their receipt here, and patented or canceled upon failure of claimants, after due notice, to furnish any additional proofs that may be necessary to their proper adjudication.

Protests and applications for hearings by parties claiming to have discovered valuable mineral deposits upon lands entered under laws relating to the disposal of agricultural lands, but where the patents have not been issued, are increasing in number, owing to some extent to the long delay in reaching agricultural entries for examination for patent. In most cases it is found necessary to order a hearing. It is an acknowledged hardship upon the agricultural entrymen, but one that the law imposes: so held by the department.

Considering the impetus already given to the mining industry by the encouragement and protection of prospectors and miners under the mining laws and regulations, I do not think that such industry would suffer if an occasional homestead or pre-emption claimant should receive his patent upon an entry in all respects regular when made, although mineral may be discovered on the land subsequent to final en-

try but prior to the issue of the patent. I would therefore recommend that a law be passed that would make a certificate of entry, regularly issued, a bar to any mining claim based upon a discovery made subsequent to such entry.

* * * * *

SURVEYS OF PUBLIC LANDS.

During the fiscal year surveys have been accepted, after an examination in the field and careful inspection of the returns in this office, as follows:

States and Territories.	Acres.	States and Territories.	Acres.
California.....	8,856.46	Nevada.....	
Colorado.....	633,654.89	New Mexico.....	1,654,179.11
Dakota.....	1,309,661.44	Oregon.....	77,829.47
Florida.....	7,423.23	Utah.....	70,970.17
Idaho.....	145,073.24	Washington.....	126,972.81
Illinois.....		Wisconsin.....	21.82
Kansas.....		Wyoming.....	66,770.34
Minnesota.....	4,495.70		
Missouri.....	53.42	Total.....	4,544,372.33
Montana.....	1,038,131.13		

* * * * *

IRRIGATION.

Referring to this subject and the extracts relating thereto from the reports of several United States surveyors-general which were printed in the last annual report, (pages 181-184,) it is deemed proper to embody in this report the action taken by Congress in making appropriations to initiate and carry on the work of investigating the extent to which the arid region of the United States can be redeemed by irrigation.

On March 20, 1888, was approved a joint resolution directing the Secretary of the Interior, by means of the Director of the Geological Survey, to investigate the practicability of constructing reservoirs for the storage of water in the arid region of the United States and to report to Congress. Said resolution reads as follows:

Whereas a large portion of the unoccupied public lands of the United States is located within what is known as the arid region and now utilized only for grazing purposes, but much of which, by means of irrigation, may be rendered as fertile and productive as any land in the world, capable of supporting a large population, thereby adding to the national wealth and prosperity;

Whereas all the water flowing during the summer months in many of the streams of the Rocky mountains, upon which chiefly the husbandman of the plains and the mountain valleys chiefly depends for moisture for his crops, has been appropriated and is used for the irrigation of lands contiguous thereto, whereby a comparatively small area has been reclaimed; and

Whereas there are many natural depressions near the sources and along the courses of these streams which may be converted into reservoirs for the storage of the surplus water which during the winter and spring seasons flows through the streams, from which reservoirs the water there stored can be drawn and conducted through properly constructed canals, at the proper season, thus bringing large areas of land into cultivation and making desirable much of the public land for which there is now no demand; therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior, by means of the Director of the Geological Survey, be, and he is hereby, directed to make an examination of that portion of the arid regions of the United States where agriculture is carried on by means of irrigation, as to the natural advantages for the storage of water for irri-

gating purposes with the practicability of constructing reservoirs, together with the capacity of the streams and the cost of construction and capacity of reservoirs and such other facts as bear on the question of storage of water for irrigating purposes; and that he be further directed to report to Congress as soon as practicable the result of such investigation.

The act approved October 2, 1888, making appropriation for the sundry civil expenses of the government for the fiscal year ended June 30, 1889, contains the following item, viz:

For the purpose of investigating the extent to which the arid region of the United States can be redeemed by irrigation, and the segregation of the irrigable lands in such arid region, and for the selection of sites for reservoirs and other hydraulic works necessary for the storage and utilization of water for irrigation and the prevention of floods and overflows, and to make the necessary maps, including the pay of employes in field and in office, the cost of all instruments, apparatus, and materials, and all other necessary expenses connected therewith, the work to be performed by the Geological Survey, under the direction of the Secretary of the Interior, the sum of one hundred thousand dollars or so much thereof as may be necessary. And the Director of the Geological Survey, under the supervision of the Secretary of the Interior, shall make a report to Congress on the first Monday in December of each year, showing in detail how the said money has been expended, the amount used for actual survey and engineer work in the field in locating sites for reservoirs, and an itemized account of the expenditures under this appropriation. And all the lands which may hereafter be designated or selected by such United States surveys for sites for reservoirs, ditches, or canals for irrigation purposes, and all the lands made susceptible of irrigation by such reservoirs, ditches, or canals are from this time henceforth hereby reserved from sale as the property of the United States, and shall not be subject after the passage of this act to entry, settlement, or occupation until further provided by law: *Provided*, That the President may at any time in his discretion, by proclamation, open any portion or all of the lands reserved by this provision to settlement under the homestead laws.

The act approved March 2, 1889, making appropriation for the sundry civil expenses of the government for the fiscal year ending June 30, 1890, contains the following additional appropriation for irrigation surveys, viz:

For the purpose of investigating the extent to which the arid region of the United States can be redeemed by irrigation and the segregation of irrigable lands in such arid region, and for the selection of sites for reservoirs and other hydraulic works necessary for the storage and utilization of water for irrigation and for ascertaining the cost thereof, and the prevention of floods and overflows, and to make the necessary maps, including the pay of employes in field and in office, the cost of all instruments, apparatus, and materials, and all other necessary expenses connected therewith, the work to be performed by the Geological Survey, under the direction of the Secretary of the Interior, two hundred and fifty thousand dollars, of which sum fifty thousand dollars shall be immediately available; and the Director of the Geological Survey, under the supervision of the Secretary of the Interior, shall make a report to Congress on the first Monday in December of each year, showing in detail how the said money has been expended, the amount used for actual survey and engineer work in the field in locating sites for reservoirs, and an itemized account of the expenditures under this and any future appropriation.

In conformity with the provisions of the acts as quoted the Director of the United States Geological Survey has notified the Secretary of the Interior of the selection of the following sites for reservoir purposes, situate in the several States and Territories designated, all of which selections were approved by the department:

Clear lake, Lake county, California, as a reservoir site, together with all lands situate within two statute miles of the borders of said lake at high water. Letter dated June 7, 1889.

Independence lake, Nevada county, California, together with the lands bordering thereon, as a reservoir site. The lands included in said site are situate in sections 2, 3, 4, 5, 8, 9, 10, in township 18 north, range 15 east; the SE $\frac{1}{4}$ of section 32 and sections 33, 34, and 35, in township 19 north, range 15 east, Mount Diablo meridian. Letter dated August 5, 1889.

Donner lake, Nevada county, California, together with the lands adjacent thereto, as a reservoir site. The lands included in said site are situate in sections 10, 11, 12,

13, 14, 15, 22, 23, 24, township 17 north, range 15 east, and sections, 7, 8, 17, 18, 19, 20, township 17 north, range 16 east, Mount Diablo meridian, California. Letter dated August 5, 1889.

Webber lake, Sierra county, California, together with the lands bordering thereon, as a reservoir site. The lands included in said site are situate in sections 20, 21, 22, 27, 28, 29, 32, 33, 34, township 19 north, range 14 east, Mount Diablo meridian, California. Letter dated August 5, 1889.

Twin lakes, Lake county, Colorado, as reservoir sites, together with all lands situate within 2 statute miles of the borders of said lakes at high water. These lakes are in close proximity to each other, and are located in sections 15 to 22, inclusive, township 11 south, range 80 west. Letter dated July 8, 1889.

Sam Pitch river, San Pete county, Utah, the lands included in said proposed site being situate in sections 16, 21, 28, 32, and 33, township 18 south, range 2 east. Letter dated July 18, 1889.

Bear lake, Utah, as a reservoir site, together with all lands adjacent thereto and within 2 statute miles of the borders of said lake at high water. The lands to be segregated are included in townships 13, 14, and 15 north, ranges 5 and 6 east, Salt Lake meridian, Utah. Letter dated July 19, 1889.

Bear lake, Bear lake county, Idaho, as a reservoir site, together with all lands situate within 2 statute miles of the borders of said lake at high water. The lands to be segregated are included in townships 12 to 16, inclusive, south, ranges 43 and 44 east, Boise meridian, Idaho. Letter dated July 19, 1889.

Montana.—Sections 21 and 22, township 9 north, range 2 east; section 12, township 9 north, range 2 west; sections 7 and 8, township 9 north, range 3 west; sections 18 and 19, township 18 north, range 6 west; sections 13 and 24, township 18 north, range 7 west; sections 5 and 8, township 22 north, range 4 east; all of township 22 north, range 3 east; all of township 26 north, range 7 west; and section 17, township 25 north, range 6 west. Letter dated July 19, 1889. These lands are located in Meagher, Jefferson, Lewis and Clarke, and Choteau counties.

Sevier river, Millard county, Utah, as a reservoir site, the lands therein being situate in sections 2, 3, 10, 11, 14, and 15, township 17 south, range 7 west, Salt Lake meridian. Letter dated July 26, 1889.

Rio Grande river, above the site of El Paso, N. Mex., as an international dam and reservoir: all public lands on the right bank of the Rio Grande river, between the Mexican boundary line and a point 20 miles above that boundary line and extending 4 miles west of said right bank, reserved from entry and sale. Said lands are situate in townships 26, 27, and 28 south, range 2 east, and townships 26 to 29, inclusive, south, range 3 east, Las Cruces district. Letters dated July 13 and 30, 1889.

The following circular was issued in compliance with your instructions. As the subject-matter of the same relates to the arid lands reserved for reservoir purposes the insertion of a copy of the circular in this connection is deemed appropriate:

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., August 5, 1889.

Registers and Receivers, United States Land Offices:

GENTLEMEN: Information having reached this department that parties are endeavoring to make filings on arid lands reserved for reservoirs, irrigating ditches, and canals, and for the purpose of controlling the waters of lakes and rivers and their tributaries in the arid regions, I am directed by the Hon. Secretary of the Interior to call your special attention to the act of Congress approved October 2, 1883, U. S. Statutes at Large, volume 25, page 526, as follows:

"For the purpose of investigating the extent to which the arid region of the United States can be redeemed by irrigation, and the segregation of the irrigable lands in such arid region, and for the selection of sites for reservoirs and other hydraulic works necessary for the storage and utilization of water for irrigation and the prevention of floods and overflows, and to make the necessary maps, including the pay of employes in field and in office, the cost of all instruments, apparatus, and materials, and all other necessary expenses connected therewith, the work to be performed by the Geological Survey, under the direction of the Secretary of the Interior, the sum of one hundred thousand dollars or so much thereof as may be necessary. And the Director of the Geological Survey, under the supervision of the Secretary of the Interior, shall make a report to Congress on the first Monday in December of each year, showing in detail how the said money has been expended, the amount used for actual survey and engineer work in the field in locating sites for reservoirs, and an itemized account of the expenditures under this appropriation. And all the lands which may hereafter be designated or selected by such United States surveys for

sites for reservoirs, ditches, or canals for irrigation purposes, and all the lands made susceptible of irrigation by such reservoirs, ditches, or canals, are from this time henceforth hereby reserved from sale as the property of the United States, and shall not be subject after the passage of this act to entry, settlement, or occupation until further provided by law: *Provided*, That the President, at any time, in his discretion, by proclamation, may open any portion or all of the lands reserved by this provision to settlement under the homestead laws."

The object sought to be accomplished by the foregoing provision is unmistakable. The water sources and the arid lands that may be irrigated by the system of national irrigation are now reserved, to be hereafter, when redeemed to agriculture, transferred to the people of the Territories in which they are situated for homesteads. The act of Congress and common justice require that they should be faithfully preserved for these declared purposes.

The statute provides that all lands which may hereafter be designated or selected by the Geological Survey as sites for reservoirs, ditches, or canals for irrigating purposes, and all lands made susceptible of irrigation by such reservoirs, ditches, or canals, are since the passage of said act absolutely reserved from sale as property of the United States, and shall not be subject after the passage of the act to entry, settlement, or occupation until further provided by law or the President, by proclamation, may open said lands to settlement.

Neither individuals nor corporations have a right to make filings upon any lands thus reserved, nor can they be permitted to obtain control of the lakes and streams that are susceptible of uses for irrigating purposes.

You will therefore immediately cancel all filings made since October 2, 1888, on such sites for reservoirs, ditches, or canals for irrigating purposes, and all lands that may be susceptible of irrigation by such reservoirs, ditches, or canals, whether made by individuals or corporations, and you will hereafter receive no filings upon any such lands.

This order you will carry into effect without delay.

Respectfully,

W. M. STONE,
Acting Commissioner.

In his annual report for the fiscal year ended June 30, 1889, the United States surveyor-general for Idaho refers to the subject of irrigation in that Territory as follows:

Since my last annual report the subject of irrigation in Idaho upon a large scale, with aid from the government, is attracting the generous consideration of Congress and the enthusiastic co-operation of our citizens. On February 23 last I submitted a report to the department upon the feasibility of irrigating, and thus reclaiming, three or four millions of acres of the Snake River valley by means of a canal along the foot-hills on either side from near Eagle Rock, on the Utah and Northern railroad, to the vicinity of Weiser, Idaho, on the Oregon Short Line railway, and urged the importance of a survey, for the purpose of getting the necessary data whereon to base an opinion as to the practicability of the plan and an estimate of the cost.

Acting in accordance with my suggestion Major Powell has begun this important work.

Corps of United States engineers, under the direction of the Bureau of Geological Survey, have commenced operations in the Upper Snake River valley. Through the efforts of Governor Shoup, of this Territory, and myself, statistical information is being collected in every county by surveyors, departmental surveyors, and well-informed citizens, by means of which this office will be enabled to compile very full and reliable data for the use of the United States Senate Committee on Irrigation, which will hold a session in Boise city next month.

Enough has already been reported to warrant the belief that more than six millions of acres can easily be reclaimed from dry, arid plains and made to produce from \$30 to \$50 worth of hay, grain, and vegetables per acre.

The large yield from these lands is the result not only of the control of the water supply, the early seed-time, and the certain security at harvest, but also of the adaptability of the soil itself. In the eastern States their subsoils are mostly alumina and clay shale, whilst our Rocky mountains are largely a basaltic formation and our soil the same, thus containing much silica, magnesia, and lime, with abundant alkali everywhere. No commercial fertilizers will ever be needed here, for the irrigation waters come laden abundantly with just what is wanted to form a soil inexhaustibly fertile.

Except upon the mountain plateaus, which must remain uninhabited because of the great snowfall, the climate of Idaho is more equable and pleasant than in Ohio, Indiana, and Illinois. No sunstrokes ever occur, nor great storms of wind or rain.

Without this comprehensive system of canals and storage reservoirs to bring the

abundant waters upon this wide extent of arid plains, Idaho has now nearly reached its limit in agricultural prosperity. The homestead grants by Congress yet left on the public domain are no longer of value, and the grants of school lands and lands for educational and charitable purposes will remain a worthless boon.

Although it is not one of the duties of this office by statutory act nor by any departmental regulation to take action in the matter of irrigation, yet through the information collected in this office from the public surveys already made and the numerous applications of citizens for additional surveys a report upon this subject of vital interest to the General Land Office it is hoped is not inappropriate.

The liberal grants of right of way for ditches by Congress and the more liberal legislation of this Territory authorizing the appropriation of water rights appear to have been made with the single view of utilizing the water in the gulches for mining purposes, not for large rivers covering the homesteads of a dense population. A man may now "file upon" an unlimited amount of water, post up and record his notice, and hold it indefinitely by a mere semblance of possession.

As the government is likely to inaugurate this work of vital necessity speculators will not be slow in securing these easily-obtained water rights, to the jeopardy of the project itself, to the glutting of court proceedings, and not unlikely to the remedies of mobs and violence.

The irrigation and reclamation of the arid lands of the West should be undertaken by the government, or the lands be granted to the respective States and Territories upon such terms and conditions as will assure the construction of necessary canals and reservoirs for reclaiming all of the lands possible.

When thus reclaimed these lands in Idaho will support a dense population, afford homes for thousands of settlers, and be a source of wealth to their possessors and of revenue to the government, both State and national.

The immediate enhancement in the value of lands now a desert waste would be so great as to far more than refund the cost of irrigation, and the work is of such character as should be undertaken either by the federal government or by the Territory or State, in order that the greatest good might result to the greatest number.

No more profitable investment for a portion of the Treasury surplus could be devised than that herein outlined.

In his annual report for the fiscal year ended June 30, 1889, the United States surveyor-general for Nevada describes at some length the arid regions of that State and the beneficial results which will ensue from the storage of water in the several localities named, as also the natural reservoirs or lakes and other facilities which can be utilized under the provisions of the act approved October 2, 1888. In view of the valuable information contained in said report regarding the subject of irrigation the following extracts are herewith appended:

While the State has such a wide range as to crops its productive qualities as to quantity are limited by reason of the great lack of water, the rainfall being limited throughout the greater part of its area to the winter rains and snowfall; and about all the water used for irrigation purposes is derived from snow stored upon the summits and ravines of the highest mountain ranges, which, melting slowly, comes down to the plains at the bases of the mountains, and then is caught and led by ditches to the fields prepared for its use.

There are two distinct regions of the State which receive an annual average of 15 inches of rainfall. One, comprising the north halves of Washoe and Humboldt counties, lies in the northwestern quarter of the State, and reaches eastward to the Quin River valley. The other lies in the southwestern part of Elko and the eastern portion of White Pine counties, and ranges westward from the east line of the State as far as the town of Eureka, and includes the Ruby Mountain range. Had these two regions a continuous subsoil of clay I have no doubt but that all kinds of crops adapted to the latitudes could be raised without much aid from a system of irrigation.

But as is the case in many other parts of the State the subsoil consists of loose beds of gravel, thus permitting the water on the surface to rapidly disappear therefrom. Hence an irrigation system in these two regions will certainly meet with the greatest success, and will produce the greatest aggregate result.

The balance of the State receives less than 15 inches of rainfall per year and some parts much less. Yet within the limits of these drier regions are found the most extensive and flourishing farming communities of the State, all that portion bordering on the Sierra Nevadas being supplied from the eternal snows found packed into the ravines between the lofty crags and summits of that grand mountain chain.

Impounding water for the purpose of the agriculturist has been but little practiced within this State. Some notable examples exist, however, in which water stored by

dams in the mountain gorges has been brought many miles in ditches constructed for the purpose, and by its vivifying influence large tracts of land, several sections in extent, have been brought under cultivation, yielding crops to the value of not less than \$40 per acre, where before the improvements were made nothing but sage-brush grew, and where it was impossible to grow anything else for the want of water, the rainfall at the best being but a few inches per year.

The proprietor informs me that at first it required a depth of water equal to 4½ feet, applied over the whole tract, to moisten it sufficiently to sprout the seed. He was surprised at the fact, and upon sounding a well 90 feet deep in about the center of the tract he found that he was filling the subsoil at that depth full of water. Since that time the land has not required so much water.

I examined the locality, and found it, like so many of the valleys in this State, possessing a deep subsoil of gravel.

A clay subsoil would not have required so much water for the whole crop season.

In a few localities alfalfa is raised without irrigation. This is where the water supply is certain, and flows naturally down from the adjacent mountains in an under-current and is received by a clay subsoil. In these same localities it is possible to raise the small grains without artificial water supply.

In connection with the subject of irrigation the United States surveyor-general for Nevada has embodied in his annual report a number of interesting letters from residents in various localities of the State descriptive of the class and character of the lands in Elko, White Pine, Lincoln, Nye, Esmeralda, and other counties in different parts of the State of Nevada, and their natural products and capabilities wherever water can be had for irrigation purposes.

* * * * *

FRAUDULENT ENTRIES.

COMPULSORY ATTENDANCE OF WITNESSES.

During the year there have been fewer new cases of fraudulent entries reported than heretofore.

The greatest difficulty the special agents have had to contend with in investigating alleged fraudulent entries is to procure the attendance of their witnesses at the hearings before the local land officers. As a rule they have little difficulty in obtaining information from settlers and others relative to cases under investigation, and generally obtain the affidavits of such persons; but when they are summoned to appear as witnesses before the registers and receivers it is an entirely different matter. This may be attributed to three causes: (1) intimidation of government witnesses by parties interested in the land in dispute; (2) unwillingness of parties to testify against their neighbors openly; and (3) indifference of parties, who think they have done enough when they have given the agent the information on which to base his report.

As a remedy for this evil I earnestly recommend that Congress be asked to pass a law giving registers and receivers authority to issue subpoenas compelling witnesses to appear before them (or commissioners appointed by them to take testimony) to testify in land cases; and in case of failure to answer the summons that the registers and receivers certify such fact to the United States district judge, to whom authority should be given to fine such person for contempt of court in refusing to respond to the summons. If such authority were given it would be of incalculable assistance to the government and of great aid to individual contestants, who sometimes fail because of their inability to cause the attendance of material witnesses; and for the same reasons as with contestants it is but justice that claimants should have the benefit of such a law.

SPECULATION IN COAL LANDS.

Special agents report that efforts have been made by certain wealthy individuals and corporations to fraudulently acquire title to large tracts of coal lands in violation of law and existing departmental regulations thereunder, with a view to monopolizing the valuable coal lands of the public domain in certain localities, and thereby defeating the purpose of Congress in restricting the acreage of land which may be entered by an individual or association.

The methods pursued may be illustrated by cases reported in the State of Colorado and in Wyoming and Washington Territories. In the Colorado case a certain individual and his associates made six hundred and ninety coal declaratory statements for lands in the southern part of the State in the names of persons who had never seen the lands. They first prepared and had printed for their own use blank forms of coal declaratory statements from which was omitted the important allegation required by the statute that the applicant "had opened and improved a valuable coal mine" on the land.

Contracts were then made with various parties to furnish them the description of coal lands upon which they could make filings, the contrivers stipulating to do all necessary development work and to represent the applicants at the local land office, and in many cases agreeing to sell the lands within twelve months at a price that would yield a profit of \$10 per acre to claimants, the latter contracting to sell their respective claims upon stipulated conditions. In many instances there were no surface indications of coal and it could not possibly have been reached except by sinking a shaft to the depth of 200 feet or more, and its existence at that depth was exceedingly doubtful, yet the parties allege in their affidavits, as to labor and improvements, that they had sunk a shaft of only 5 feet. This so-called "shaft" being in most cases simply a hole in the ground from which about a cubic yard of earth had been taken, and in some instances one such hole at the common corner of four claims was made to do duty for them all. The parties in whose names the declaratory statements were filed were not required to do any work or expend any money, and their profits in the transaction were to be in consideration of the use of their names.

The instigators of this attempted fraud, it is alleged, boasted that they had negotiated a sale of 110,000 acres of these lands to an eastern syndicate, and their commissions in the deal would amount to \$550,000. By the discovery, however, of the scheme in its incipency, this office was enabled to defeat it. The declaratory statements were rejected and the instigator of the fraudulent transaction disbarred from practicing before the local land offices. Notwithstanding all of this it is reported that other parties are endeavoring to obtain title to the lands by similar methods.

In the Wyoming case a company was organized for the purpose of getting title to certain unsurveyed coal lands in the western part of the Territory, and of building a railroad to transport the coal to market. The headquarters of the company were in New York city, where all of its financial affairs were managed. An expert was employed who submitted a favorable report, and it was decided that the agent of the company should secure control of all of said coal lands if possible. The agent located about 2,600 acres of the lands and placed men thereon to hold possession. Afterwards he bought out a large number of individuals who had previously made locations on other coal lands in that vicinity, paying therefor from \$8,000 to \$10,000. Upon the lands being

surveyed the agent proceeded to file declaratory statements thereon in the names of non-residents of the Territory, who had executed powers of attorney authorizing him to act for them in all matters pertaining to their claims, the understanding and agreement being that if title to such lands should be acquired under the filings the lands were to become the property of the company, who was to pay all expenses. As these filings expired others were substituted in their place under similar powers of attorney.

In this way the company held possession of the lands for seven or eight years, during all of which time the officers of the company in New York city were carrying on negotiations with capitalists for the purpose of obtaining money to purchase the lands and to construct the railroad to transport the coal. The deliberate and systematic plans devised and carried on to evade the law and hold possession of the lands until they could be finally entered for the benefit of the parties to whom the company might sell were fully and minutely detailed by the agent of the company who instigated the scheme and conducted the operations in the field. A disagreement having arisen between this agent and the other officers of the company the former was discharged, and the original design appears to have been abandoned or changed, or at least the evidence of its continuance could not be obtained. A portion of the lands, however, were subsequently entered by some of the individuals in whose names the last batch of filings were made and by other persons who had not made filings.

In the Washington Territory case the lands appear to have been first entered in good faith by various homestead settlers before the discovery of coal. After the allowance of the entries the coal operators learned of the existence of valuable coal and immediately sent out their agents to defeat the claims of the settlers and to obtain, if possible, the relinquishment of their entries. By means of false representations and intimidation the claimants were induced or compelled to relinquish all of their rights to the government in consideration of a small money bonus and an agreement to deed back to them, when the title was acquired under the coal law, the surface of the land. After the execution of the relinquishments the services of other persons were secured, and in some cases the homesteaders themselves were persuaded to go to the local office and make cash entries of the relinquished tracts, irrevocable powers of attorney having previously been given to the agents or their principals authorizing them to dispose of the lands. All expenses were paid by the agents.

In this way large bodies of coal lands, which will eventually be of great value, are being illegally appropriated; and the guards and restrictions in the law as it now stands are entirely insufficient to prevent such appropriation and the entry and monopoly of the public coal lands by unscrupulous speculators or corporations. The rapid destruction of the forests and the scarcity of wood will leave the settlers in the arid regions of the West without fuel, unless the government coal lands are preserved and disposed of or controlled in such a manner as to secure to them coal at reasonable rates. This is indispensable to the future welfare and prosperity of many of the western States and Territories, and the power to accomplish such a purpose is being gradually weakened, if not entirely destroyed or taken away, by allowing the lands to go directly into the hands of railroad and other corporations through names of nominal entrymen and without any restrictions as to disposition of the coal.

I would therefore recommend that a thorough geological survey be

authorized by Congress, and made under the direction of the Secretary of the Interior, of all public lands supposed to contain valuable coal, and that the Secretary be given discretionary powers to reserve from sale all or any portion of said lands; and if he deem it advisable and in the interest of the people residing in the locality of the lands, to lease for a period of years the lands so reserved upon such conditions and restrictions as will compel the lessees to furnish settlers with coal at moderate prices. The law regulating the sale of coal lands should also be amended by making it a felony for any person to enter into a contract or an agreement having for its object the entry of said lands or the appropriation or reservation of the same by means of coal declaratory statements for the use or benefit of a person other than the nominal claimant.

TIMBER DEPREDATION

The rapid exhaustion of the most valuable timber on the public lands makes this subject, in my opinion, one of the most important requiring consideration by this administration.

While most strenuous efforts have been made by this office to put a stop to the unlawful appropriation of public timber by unscrupulous corporations for purposes of speculation and sale, but little has been accomplished, owing principally to two causes, *viz*, the want of active co-operation heretofore on the part of the officers of the Department of Justice, and the diverse and conflicting decisions rendered by the courts upon identical questions.

The several laws relating to the public timber appear to be imperfectly understood by many whose duty it is to enforce them.

Numerous petitions are annually received at this office for permission to procure timber from the public lands for certain purposes or under certain conditions, which the law in express terms prohibits; and in some instances the petitions are indorsed recommending that the same be granted by men who were instrumental in passing the laws.

The public at large seemingly fail to comprehend that the duties of the Commissioner of the General Land Office are purely executive. He can not violate the laws of the land himself nor can he authorize or permit others to do so, but he must, so far as he is able, enforce them. This lack of comprehension is owing in a great measure to the ambiguous wording of some of the laws and the numerous contradictory constructions placed thereon by the courts as well as by former heads of this department.

Section 2461, United States Revised Statutes, provides that it shall be unlawful for any person to cut or remove, or to cause, or procure, or aid, or assist, or be employed in cutting or removing any timber from any lands of the United States "with intent to export, dispose of, use or employ the same in any manner whatsoever, other than for the use of the navy of the United States."

There is no possible excuse for misunderstanding that law. If properly enforced it provides full and ample protection for the timber upon the public lands, and if it alone were in force to-day public timber would cease to be an article of traffic and speculation.

In the land grants to several railroads it is provided that the roads shall have the right to take from public lands adjacent to the line of the roads the timber necessary for the construction thereof; and the act of March 3, 1875 (chapter 132, supplement to Revised Statutes), extended this right to all right-of-way railroads upon complying with certain

conditions. One road only (the Denver and Rio Grande railroad) is authorized by law to take timber for repairs.

Under color of these laws millions of feet of public timber have been unlawfully appropriated; the elastic term "adjacent to the line of road" being held to extend to any distance from which timber could be procured, and the term "construction purposes" being held to apply not only to the road-bed proper, bridges, etc., but to station houses, depots, snow-sheds, etc.

The vague and indefinite wording of the act of June 3, 1878 (20 Stat., 88), authorizing the residents of certain States and Territories and other mineral districts to procure timber from public mineral lands for "building, agricultural, mining, and other domestic purposes," opened the flood-gate to the unlawful procurement of timber from public lands and has resulted in the destruction of some of the finest forests in the world.

Referring to this act Judge Deady, in the case of *United States vs. Smith* (2 Fed. Rep., 487), stated as follows:

The act is very loosely and unskillfully drawn, and abounds in unnecessary and indefinite phrases and clauses of the and-so-forth character.

And Justice Miller, in the case of *E. E. Bolles Wooden Ware Company vs. United States*, referring to the same act, remarked:

Its [the government's] liberality in allowing trees to be cut on its land for mining, agricultural, and other specified uses has been used to screen the lawless depredator who destroys and sells for profit.

In the case of *United States vs. Milo J. Legg et al.*, Montana (L. O. Report, 1887, p. 480), the court held that parties who cut timber under authority of said act must be able to prove "by a preponderance of evidence that the lands from which the same was cut are more valuable for the mineral than for any other purpose." While in the case of the *United States vs. Edwards*, district court, Colorado, Judge Hallett, June term, 1889, the court held in effect that parties could cut timber under authority of said act upon any public land that was not agricultural and returned as mineral.

In my opinion the act of June 3, 1878, in so far as the interests of the community at large are concerned, is the most unfortunate act relating to the public timber that has ever been enacted. Mineral exists principally in the mountainous districts, where the lands are interspersed with gulches and narrow ravines, the headwaters of the streams and rivers which run through the valleys below. These mountains and high lands are during the winter months covered with deep snow and ice, which, during the spring and early summer months, melt away and irrigate the valleys. To insure the gradual melting of this snow and ice and secure the valleys from inundation which would result from the sudden melting of the same, nature has provided in the trees and undergrowth of the steep mountain sides protection against the fierce sun's rays and waste of water by evaporation. The destruction of this natural protection is authorized and encouraged by the act referred to, and the inundations and floods which from time to time devastate portions of our country are the results which follow.

It is safe to say that the loose and indefinite wording of the acts authorizing railroad companies to take timber from public lands for construction purposes, and residents of Colorado, Nevada, New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho, Montana, and other mineral districts, to take timber from public mineral lands for domestic purposes, has caused the unnecessary, wasteful, and improvident destruc-

tion of extensive forests, and the rights and interest of the people at large demand their repeal.

I have referred to the above laws and to the variable constructions they are liable to for the purpose of showing the department the difficulties in the way of protecting the public timber. What I suggest is that language conferring these important rights should be so specific and clear as to avoid any possible misconstruction. In my opinion the enactment of an entirely new, plain, concise, and unmistakable law relative to the public timber, in which its use as an article of traffic and for the purpose of speculation and sale shall be prohibited in definite and specific terms, and the repeal of all laws regarding public timber now in force, are imperatively necessary.

The question has been before Congress for several sessions, and numerous bills on the subject have been under consideration, but have failed of final action. Further delay in this matter can but be attended with serious results in the near future. It is accordingly urgently demanded that due measures be taken at an early date to secure by legislative action proper provision in this matter for the interest of present settlers and coming generations.

OPENING OF OKLAHOMA.

The most important event for several years in the administration of the affairs of this bureau was the opening of the Oklahoma country, in the Indian Territory, to settlement and entry on April 22, 1889.

Copies of the President's proclamation and the departmental orders issued thereunder, providing for the disposal of these lands, will be found in their proper place, in appendix "C" of this report, together with abstracts of such of the important decisions on questions arising in Oklahoma as are deemed of public interest.

For the purpose of assisting the registers and receivers in properly opening the two new offices, Guthrie and Kingfisher Station, four clerks were detailed from this office by my predecessor, with your approval, to go to the two offices and be present on the day of opening and as long thereafter as their services might be required.

OKLAHOMA TOWNSITES.

Section 13 of the act of March 2, 1889, contains the following provision respecting townsites in Oklahoma:

The Secretary of the Interior may, after said proclamation and not before, permit entry of said lands for townsites, under sections twenty-three hundred and eighty-seven and twenty-three hundred and eighty-eight of the Revised Statutes, but no such entry shall embrace more than one-half section of land.

Inasmuch as sections 2387 and 2388 of the Revised Statutes designate certain officials who alone can apply to make townsite entries, and as no Territorial or State government exists in that Territory having authority to provide for such officials, it was held by my predecessor that no such entries can be allowed there until further legislation is had.

The following letter to Senator Vest shows the situation in this respect:

WASHINGTON, D. C., April 5, 1889.

Hon. G. G. VEST,
United States Senate:

SIR: I have the honor to return herewith the letter which you recently left in this office, addressed to you by H. S. Wicks, esq., dated at Kansas city, Mo., the 1st instant, about townsites in Oklahoma, Indian Territory, and in reply thereto have to state as follows, viz:

The act of Congress of March 2, 1889 (Public No. 155,) which is the only legislation

providing for disposing of lands in the Indian Territory as part of the public domain, enacts that townsite entries may be allowed under sections 2387 and 2388, United States Revised Statutes. (See inclosed circular of April 1, 1889.) The provisions of said sections 2387 and 2388, under which only such entries can be admitted, are explained in subdivision 111, on pages 4 and 5, of official circular of July 9, 1886, copy inclosed.

In reference to the specific questions by Mr. Wicks's letter I have to state:

(1) That the Oklahoma lands are all surveyed, and any claims for townsite purposes therein under said sections 2387 and 2388 must be for the tracts actually settled upon and occupied by the inhabitants according to the proper legal subdivisions established by such surveys. Hence no plats or surveys of the townsites will be required for the purpose of entry at the district land office, and the land so occupied must be identified as the tract applied for by the proper proof, specified on page 5 of said circular of July 9, 1886, which must be submitted to the district land officers.

(2) No measures can be taken on the land for establishing a town prior to 12 o'clock noon of the 22d instant, when for the first time the land becomes open for settlement under the proclamation.

(3) It will be seen by reference to sections 2387 and 2388, as given in circular of July 9, 1886, that they require for effecting a townsite entry that the town shall be incorporated, in which case the entry must be made by the corporate authorities, for which the mayor may act; or if the town is not incorporated that the judge of the county court for the county in which such town is situated shall make entry.

As it appears that there are neither laws for incorporating towns nor county organizations now existing in Oklahoma, it does not appear to be feasible for entries to be effected under said sections while this condition continues, and should applications therefor be made to the district officers under said sections, but, in the absence of officials properly qualified to make entry in trust for the inhabitants according to the provisions thereof, the register and receiver are directed, in circular of April 1, 1889, to report the same and await further instructions before allowing entry of the lands.

The legal prerequisites to the establishment of towns, or their incorporation as such, are dependent upon local laws after entry is allowed under said sections 2387 and 2388 in trust for the inhabitants. The execution of such trust as to the disposal of the lots in such town and the proceeds of the sales thereof is to be conducted under such regulations as may be prescribed by the legislative authority of the State or Territory. (See said section 2387.) As an example of such legislation reference may be made to the compiled laws of Kansas. (Dassler, 1881, 972 and 973.)

While there appears to be no means by which townsite entries may be effected, and the method of proceeding thereafter determined as to the rights of the inhabitants in Oklahoma, until legislative provision is made for the proper town and county organizations and for the execution of the trust as contemplated in said sections 2387 and 2388, any lands actually selected as the site of city or town, or any lands actually settled and occupied for purposes of trade and business and not for agriculture, by bona fide inhabitants, are in a state of reservation from disposal under the homestead laws, by sections 2258 and 2259, United States Revised Statutes, which will operate to preserve the claims of the inhabitants of towns from interposing adverse rights of settlers until such time as they may be enabled to secure the right title to their lots under future legislation.

Very respectfully,

S. M. STOCKSLAGER,
Commissioner.

Thirteen applications for townsite entries have been made in the Guthrie district and seventeen in the Kingfisher Station district, making thirty in all in the Territory. Of these applications eight have been rejected by this office on account of gross informality, and twenty-two remain without definitive action.

It is highly important to the citizens of these various localities that some means be furnished at as early a date as possible for the settlement of their titles. This can only be done by Congressional action.

PUBLIC LAND STRIP.

The opening of Oklahoma has increased the anxiety of the inhabitants of the narrow strip of public land just west of the Indian Territory, and commonly known as "No Man's Land," for some legislation in their behalf. I am in receipt of numerous petitions and memorials on the subject, and I desire to urge as strongly as I can the importance of calling the attention of Congress to this matter.

The following petition, signed by Thomas P. Brakewood and eighty-nine others and addressed to the President, states the condition of that part of the country so clearly that I submit it, with my full indorsement:

BEAVER, PUBLIC LAND STRIP,
Indian Territory, May 22, 1889.

To His Excellency Hon. BENJ. HARRISON,
President United States of America, Washington, D. C.:

We, the undersigned citizens and residents of the Public Land Strip, commonly called "No Man's Land," being that portion of land lying between the Indian Territory on the east, New Mexico on the west, Kansas and Colorado on the north, and Texas on the south, and containing about 1,800,000 acres, would respectfully state:

That we have a population of about 15,000, the vast majority of whom are law-loving and law-abiding people. That we have villages and towns building up, schools and churches in operation, and farmers tilling the soil and creating homes for themselves and their posterity, but it is all done under "squatters rights" only, and we labor at great disadvantages. The money appropriated by Congress a few years ago to survey this country was exhausted before the survey was completed, and we are without land laws. We should be placed on at least an equal footing with other portions of the public domain under the law. Oklahoma, as an instance, containing 1,800,000 acres, only half our size, was recently opened up with these benefits. We stand in urgent need of the extension of the land laws over our land, and land offices established, so that we may begin title to our homes. We only ask what is our right and justly due us as American citizens.

Therefore we earnestly request that in your call for an extra session of Congress, if you should in your wisdom call one, you embody our necessities as a part of the reasons for the extra session, so that these points will be considered. If there should be no extra session of Congress, we pray that in your message to the next regular session you call attention to and impress upon that body the urgent need we have of the survey being completed, a land district established, and land offices located, for all of which we shall be profoundly grateful.

This petition is indorsed by Hon. P. H. Pluman, chairman of the Senate Committee on Public Lands, as follows:

These people should have the laws extended over their country. This would have been done long since but for the action of those who represented them at Washington, who said nothing was desired except in connection with Oklahoma.

I call attention to the fact that before these lands can be opened to entry the survey must be completed. The township and range lines have almost all been run, and they are marked by substantial iron posts placed every two miles, but the section lines have not been established. Certainly a tract of agricultural land on which there are 15,000 settlers should be surveyed. A careful estimate of the cost of completing the survey of this strip shows that \$50,000 will amply suffice. I have therefore submitted an estimate for a special appropriation of that sum for this purpose, to be immediately available, and not to be included in the general appropriation for surveying public lands, as this work was not taken into consideration in making the estimate for such general appropriation.

* * * * *

I can not close this report without acknowledging my high obligations to the employes of this office, male and female, for their great industry, their prompt and always cheerful obedience to orders, and

their faithful attention to the various laborious duties assigned them.

To you, Mr. Secretary, my thanks are especially due for your official courtesy, uniform personal kindness, and cordial aid during my connection with the workings of this bureau. Whatever measure of success I have been able to accomplish is eminently due to the fact that I have understood your policy of a prompt and impartial execution of the laws, and to the cheerful support you have given me in carrying it out.

Respectfully,

W. M. STONE,
Acting Commissioner.

Hon. J. W. NOBLE,
Secretary of the Interior.

S U P P L E M E N T .

OUR PUBLIC DOMAIN.

No subject is of greater magnitude or importance to our people, not merely in the present but in the future, than that involved in a proper disposition of our public domain. How was that domain acquired? What is the history of its disposition in the past? What is its situation to-day? These are pregnant inquiries, increasing daily in magnitude and importance with the rapidly diminishing area of that domain, and the reproduction here of leading and important historical documents and data in relation to our public lands will be of practical value.

TITLE TO OUR NATIONAL AND PUBLIC DOMAIN.

The title to our national and public domain is derived from treaties with foreign nations, annexation, cessions from certain of the original thirteen States and from Texas, and from treaties with Indian tribes for the extinguishment of their title to lands occupied or held by them. Those treaties and cessions subsequent to the treaties of limits with Great Britain of 1783 are briefly as follows:

Treaty with France of April 30, 1803, by which the United States acquired the so-called "Louisiana purchase."

Treaty with Spain of February 22, 1819, by which the United States acquired the Floridas, etc.

Annexation of Texas under the joint resolutions of Congress of March 1 and December 29, 1845.

Treaty of Guadalupe Hidalgo with Mexico of February 2, 1848, by which California, New Mexico, and other territory was ceded to the United States.

The cession of December 13, 1850, by Texas, to the United States, now included in New Mexico, Kansas, Colorado, and the so-called Public Land Strip.

Treaty with Mexico of June 30, 1854, by which the United States acquired "the Mesilla valley," or so-called "Gadsden purchase."

Treaty with Russia of March 30, 1867, ceding Alaska to the United States.

And the several treaties with Indian tribes for the extinguishment of their title to lands occupied or held by them.

DIFFICULTIES ATTENDING THE ESTABLISHMENT OF OUR BOUNDARIES.

Our allies of France and Spain during the Revolutionary struggle for nationhood, although aiding us materially with their arms and moral support during the actual conflict, yet, at its conclusion, they developed a disposition, if not a resolute purpose, to circumscribe the boundaries claimed by the new nation. The Bourbon's historical lust of empire overruled his professed friendship for America.

The Hon. Timothy Pitkin, a laborious and able author, well informed on his subject, in his "Historical View of the Commerce of the United States," etc., declares:

For the extensive limits finally secured at the peace of 1783 the people of the United States were indebted to the firmness and perseverance of their negotiators. * * *

Pending the negotiations for peace in 1782 Great Britain for a long time insisted on the Ohio as the western boundary, and Spain still urged that the United States had no right to the country west of the [Alleghany] mountains. In this she was countenanced if not supported by France. Rayneval, the confidential secretary of Vergennes, in a written communication made to Mr. Jay on the subject of western limits, declared that the United States had no right to the lands lying between the Alleghany mountains and the Mississippi. * * * This extraordinary private communication, with the intercepted letter of Marbois and other circumstances, at last satisfied all the American negotiators at Paris that France was against them in regard to the western country; and they therefore determined to conclude a treaty with Great Britain without consulting the French court, although by their instructions they were not only to consult that court but be governed entirely by its advice or that of its ministers.

The northeastern and northwestern boundaries of the United States, under these treaties of limits, long remained in dispute, and was the cause of much subsequent negotiation between England and our government. The northeastern boundary was finally determined by the Ashburton-Webster treaty, of Washington, of August 9, 1842, and our northern and northwestern boundaries by the decision, as arbitrator, on October 21, 1872, of the German Emperor William I, in favor of the American claim.

Difficulties of like magnitude and character attended the negotiations of our subsequent treaties with France and Spain, and the adjustment of boundaries or limits under them, both with respect to Louisiana and the Floridas. M. Barbe de Marbois, one of the French ministers who, under Napoleon I, negotiated the treaty of April 30, 1803, published in 1828 a "History of Louisiana and of the cession of that colony to the United States." De Marbois describes the situation in France and the attitude of the First Consul, at the date of the cession, from an intimate personal knowledge of the secrets and facts of the negotiation. Napoleon had determined on war with England on "the rupture of the treaty of Amiens." On the seas Britain was regarded as invincible, and in consequence Napoleon was naturally apprehensive of the loss of Louisiana, a distant colony menaced by the British fleet, and which was but lately retroceded to France by the treaty of St. Ildefonso. Napoleon argued:

I know the whole value of Louisiana, and I wish to repair the fault of the French negotiator who abandoned it in 1763. Some lines of a treaty have restored it to me, and I have scarcely recovered when I must expect to lose it. But if it slips from me it will one day cost dearer to those who oblige me to deprive myself of it than to those to whom I wish to deliver it. The English have successively taken, from France, Canada, Isle Royal, Newfoundland, Nova Scotia and the richest parts of Asia. They are at work to agitate St. Domingo. They shall not have the Mississippi, which they covet. Louisiana is nothing in comparison with their acquisitions throughout the globe, and yet the jealousy which the return of this colony under the French dominion causes them proves to me that they desire to get possession of it, and it is thus they will begin the

war. They have twenty vessels in the Gulf of Mexico. They overrun those seas as sovereign, whilst our affairs in St. Domingo grow worse and worse since the death of Le Clerc. The conquest of Louisiana would be easy if they only took the trouble of making a descent there. I have not a moment to lose in putting it out of their reach. I do not know whether they are not there. It is according to their practice, and were I in their place I would not have waited. I wish, if there is yet time for it, to take from them even the idea of ever possessing the colony. I think of ceding it to the United States. I can scarcely say that I cede it to them; for it is not yet in our possession. If I leave ever so little time to our enemies I shall only transmit an empty title to these republicans whose friendship I seek. They only ask of me one town in Louisiana, but I already consider the whole colony as entirely lost, and it appears to me that in the hands of this growing republic it will be more useful to the policy and even to the commerce of France than if I attempt to retain it.

Napoleon quickly resolved on a definite line of action. He declared: "I renounce Louisiana. It is not only New Orleans that I will cede; it is the whole colony, without reserve."* He promptly instructed his ministers to close at once with the American envoys for the immediate cession of the colony to the United States.

De Marbois, in describing the progress of the negotiation, says the particulars of the cession were first discussed. Each party drew up a project as the basis of a treaty for this purpose; but that of the French negotiators was adopted as the text by which the conferences were to proceed. The chief difficulties in this part of the negotiation were in fixing the limits. Maps were examined, charters perused, ancient treaties consulted, but all these only served to increase the despair of the negotiators, and to convince them that they were searching for a thing that had never existed. No one could tell, or even conjecture, where were the western boundaries of Louisiana, and for a very good reason—they had never been defined. These regions were as little known as the center of Africa. The negotiators had the wisdom, therefore, to abandon a search which only led them more and more into the dark. To solve the difficulty in the shortest way the American plenipotentiaries proposed to insert the third article of the treaty of St. Ildefonso, by which Spain agreed to cede to France the province of Louisiana, such as it was in the hands of Spain at the date of the treaty. This was leaving the utmost latitude of construction and opening the door to a tangled discussion between the United States and Spain, which in due time this latter power took care to revive. It was nevertheless obvious that no better plan could be devised by the plenipotentiaries.

De Marbois adds that when this obscurity in the limits and the inconveniences that might arise from it were mentioned to the First Consul he replied: "If there were no obscurity it might perhaps be good policy to put some there."

All ambiguity as to boundaries will, reference to the so-called "Louisiana purchase" and the Florida. After much negotiation, extending through years, confirmed by General Andrew Jackson's brilliant military raid of 1818 into the Spanish territory, were finally determined in the settlement of limits with Spain under the treaty with that power of February 22, 1802, ceding to the United States the Floridas, and with them the title of Spanish territory west of the Mississippi east and north of the boundary described in article 3 of the treaty.

* The following expressions which dropped from Napoleon in his conversations with de Marbois during the negotiations indicate motives which also influenced him in the cession: "This cession of territory confirms forever the power of the United States, and I have just given to England a maritime rival that will humble her pride." He also said: "Perhaps it will be objected that the Americans will become too powerful for Europe in two or three centuries; but my foresight does not embrace these distant fears."

REVOLUTIONARY PERILS ARISING OUT OF THE OWNERSHIP OF OUR VACANT DOMAIN.

During the revolutionary struggle for independence or nationhood the proprietorship or disposition of "the vacant western lands" embraced in our original domain and severally claimed by different States under their conflicting charters as to boundaries was the subject of perilous dispute, giving rise to serious apprehensions of the final successful issue of the struggle. Patriotism, however, solved this dispute. Those States within the boundaries of which it was claimed these vacant lands were situated, under an appeal * of the Congress of the Confederation, surrendered to the existing government at different dates† their titles to this domain, providing that they be held in trust and appropriated for "the common benefit."

GOVERNMENT OF TERRITORY NORTHWEST OF THE OHIO RIVER.

On the cession by Virginia of her vacant western lands the Congress of the Confederation manifested its understanding of what constituted "the common benefit" in the establishment by the resolutions of April 23, 1784, and the famous ordinance of July 13, 1787, of a "Government for the Territory northwest of the Ohio river," in which, while providing for religious toleration, for the civil and political rights of the citizens, and the encouragement of schools and other seminaries of learning as necessary to "good government and the happiness of mankind," it declared (art. 6) that "neither slavery nor involuntary servitude" should exist within that territory "otherwise than in the punishment of crimes whereof the party shall have been duly convicted."

LAND GRANTS UNDER THE CONFEDERATION.

Hon. Adam Seybert, in his *Statistical Annals*, says:

Three tracts of land had been sold by contract prior to the adoption of the present form of government, that is to say:

1. To the State of Pennsylvania, the triangular tract on Lake Erie above mentioned, containing 202,187 acres.

* IN CONGRESS OF THE CONFEDERATION,
Tuesday, October 10, 1780.

Resolved, That the unappropriated lands that may be ceded or relinquished to the United States by any particular State, pursuant to the recommendation of Congress of the 6th day of September last, shall be disposed of to the common benefit of the United States, and be settled and divided into distinct republican States, which shall become members of the federal Union, and have the same rights of sovereignty, freedom, and independence as the other States; that each State which shall be so formed shall contain a suitable extent of territory, not less than one hundred nor more than one hundred and fifty miles square, or as near thereto as circumstances will admit; that the necessary and reasonable expenses which any particular State shall have incurred since the commencement of the present war in subduing any British posts, or in maintaining forts or garrisons within and for the defense, or in acquiring any part of the territory that may be ceded or relinquished to the United States, shall be re-imbursed. (Hickey's Constitution, pp. 191, 192, ed. of 1879.)

† In pursuance of the recommendations contained in the resolution of Congress of the 6th of September, 1780, the following States made cessions of territory to the United States at the Congress of the United States at New York, on March 1, 1781; Virginia, on March 1, 1784, and on December 10, 1785. (By the last act Virginia agreed to change the conditions of the act of cession of 1784 only so far as to ratify the 5th article of the compact or ordinance of 1787.) Massachusetts, on April 19, 1785; Connecticut, on September 11, 1785, confirmed May 19, 1801; South Carolina, on August 9, 1787; North Carolina, on February 25, 1790; Georgia, on April 24, 1802. (*Id.*, p. 192.) For an interesting view of the struggle under the Confederation and later between the "landed and landless States" respecting the disposition of our vacant western lands, see a valuable article (recently published) in *The Papers of the American Historical Association*. Vol. 3, No. 2, pp. 167-188.

2. To an association called "The Ohio Company" [that is, the Ohio Company of Associates], a tract on the rivers Ohio and Muskingum, originally intended to contain about 2,000,000 acres, but afterwards reduced at the request of the parties to 964,285 acres.*

3. To John Cleves Symmes and his associates a tract on the Ohio between the rivers Little and Great Miami, originally supposed to contain 1,000,000 acres, but which, by an alteration and then a failure in the contract, has been reduced to 248,540 acres.†

All those lands were sold at the rate of two-thirds of a dollar (66⅔ cents) an acre, payable in evidences of the public debt of the United States, and a part of the last two tracts was paid for in military land warrants, each acre in such warrant being received in payment for one acre and a half of land.

A right of pre-emption, at the rate of \$2 an acre, has been allowed to persons who had made purchases of J. C. Symmes within the boundaries of his first contract.

EARLY PLAN FOR THE DISPOSITION OF OUR PUBLIC LANDS UNDER THE NATIONAL GOVERNMENT.

The national government created by the Constitution went into effect on March 4, 1789. The disposition of the public lands was among the most important subjects of consideration by Congress and the executive government. Several plans were urged in Congress. In the plan prepared by Alexander Hamilton, as Secretary of the Treasury under the administration of Washington, in obedience to the order of the House of Representatives of January 20, 1790, Hamilton urges:

That in the formation of a plan for the disposition of the vacant lands of the United States there appear to be two leading objects of consideration: One, the facility of advantageous sales, according to the probable course of purchasers; the other, the accommodation of individuals now inhabitants of the western country, or who may hereafter emigrate thither. The former as an operation of finance claims primary attention; the latter is important, as it relates to the satisfaction of the inhabitants of the western country. It is desirable and does not appear impracticable to conciliate both. Purchasers may be contemplated in three classes: Moneyed individuals and companies who will buy to sell again; associations of persons who intend to make settlements themselves; single persons or families now resident in the western country or who may emigrate thither hereafter. The first two will be frequently blended and will always want considerable tracts. The last will generally purchase small quantities.

Hence a plan for the sale of the western lands, while it may have a due regard to the last, should be calculated to obtain all the advantages which may be derived from the first two classes. For this reason it seems requisite that the General Land Office should be established at the seat of government. It is there that the principal purchasers, whether citizens or foreigners, can most easily find agents and that contracts for large purchases can be best adjusted. (*American State Papers, Public Lands, Vol. 1, p. 8.*)

For the promotion of these "two leading objects" Hamilton elaborated his plan for the disposition of our vacant western lands.

As early as May, 1796, three separate tracts of land were granted by Congress to Ebenezer Zane for surveying and opening a road from Wheeling to Limestone, and the flourishing city of Zanesville was built on a part of one of the tracts selected by Zane on the Muskingum.

By the act of April 21, 1792, the President was authorized to issue to the Ohio Company of Associates patents for 750,000 acres of land, besides several lots and parcels of land, within certain described limits of Ohio. He was also authorized by this act to issue to the same parties patents for an additional quantity of 214,285 acres, which the company was required to pay for within six months in "warrants issued for army bounty rights," as also patents for a further quantity to the same parties of 100,000 acres on certain prescribed conditions.

By the act of May 5, 1792, the President was authorized to issue to John Cleves Symmes and associates such quantity of land as will satisfy the payments already made by Symmes and his agents or associates

* The site of the city of Marietta was included in this private grant.

† The site of the city of Cincinnati was embraced in this grant.

under their contract of October 15, 1788, for the purchase of 1,000,000 acres, the land to be estimated at two-thirds of a dollar ($66\frac{2}{3}$ cents) per acre, etc. The President was also authorized to issue to the same parties patents for "one other tract of 106,857 acres," payment being required within six months in "warrants issued for army bounty rights," and for one complete township for the establishment of an academy and other schools and seminaries of learning. These grants were to be located within such boundaries as the President, agreeably to the act of April 12, 1792, might judge expedient.

Hence our earliest policy or plan for the disposition of our vacant lands, both by the legislative and executive branches of our government, under the Constitution as well as under the Confederation, recognized and encouraged the organization of corporations for speculative purposes in the purchase and sales of our public lands—a policy adopted by the representative men of those States which had but recently donated the land to the government, even by such illustrious and incorruptible patriots as Washington, Hamilton, and Madison.

PROPOSED "LAND GRABBING" EXTRAORDINARY UNDER THE CONFEDERATION.

President Jefferson, in a letter to M. de Reyneval dated "Washington, March 20, 1801," described some "land grabbing" schemes prior to and during the Confederation:

During the regal government two companies, called the Loyal and the Ohio Company, had obtained grants from the Crown for 800,000 or 1,000,000 acres of land each on the Ohio, on condition of settling them in a given number of years. They surveyed some and settled them; but the war of 1755 came on and broke up the settlements. After it was over they petitioned for a renewal. Four other large companies then formed themselves, called the Mississippi, the Illinois, the Wabash, and the Indiana companies, each praying for immense quantities of land, some amounting to 200 miles square; so that they proposed to cover the whole country north between the Ohio and the Mississippi and a great portion of what is south.

All these petitions were depending, without any answer whatever from the Crown, when the Revolutionary war broke out. The petitioners had associated to themselves some of the nobility of England and most of the characters in America of great influence. When Congress assumed the government they took some of their body in as partners to obtain their influence; and I remember to have heard at the time that one of them took Mr. Girard as a partner, expecting by that to obtain the influence of the French court to obtain grants of those lands which they had not been able to obtain from the British government. All these lands were within the limits of Virginia.

THE NOTORIOUS YAZOO LAND FRAUDS.

In an executive document in relation to the public lands, prepared in 1810 by the Secretary of the Treasury under a resolution of the House of Representatives, among fourteen land claims cited, aggregating a very large acreage and of more or less doubtful validity, and some of them wholly fraudulent, is included the notorious Yazoo claims. In describing these frauds in its introduction, quoted by Adam Seybert in his *Statistical Annals*, it says:

The Yazoo claims, so-called, embracing about 35,000,000 acres in the Mississippi Territory and derived from a pretended sale by the legislature of Georgia, but declared null and void, as fraudulent, by a subsequent legislature. The evidence, as published by the State of Georgia and by Congress, shows that that transaction, even if considered as a contract, is as such, on acknowledged principles of law and equity, null *ab initio*, it being in proof that all the members of the legislature who voted in favor of the sale, that is to say, the agents who pretended to sell the property of their constituents, were, with the exception of a single person, interested in and parties to the purchase. Much litigation must be expected, and orders have lately been given for the removal of certain intruders, some of whom claimed the land under this supposed title.

GENERAL WILLIAM HENRY HARRISON'S EXPOSURE OF LAND FRAUDS—
OUR JUDICIARY CONSUMMATE "LAND GRABBERS."

In a letter dated "Vincennes, January 19, 1802," addressed to Hon. James Madison, Secretary of State, and communicated to Congress by President Jefferson in a message dated February 18, 1802, General William Henry Harrison, as governor of the Northwest Territory, exposes a gigantic land fraud.

The circumstances mentioned in this letter I have considered of sufficient importance to be communicated to the President. The court established at this place under the authority of the State of Virginia in the year 1780 (as I have before done myself the honor to inform you) assumed to themselves the right of granting lands to every applicant. Having exercised this power for some time without opposition, they began to conclude that their right over the land was supreme, and that they could with as much propriety grant to themselves as to others. Accordingly, an arrangement was made by which the whole country to which the Indian title was supposed to be extinguished was divided between the members of the court, and orders to that effect entered on their journals, each member absenting himself from the court on the day that the order was to be made in his favor, so that it might appear to be the act of his fellows only. The tract thus disposed of extends on the Wabash 24 leagues from La Pointe Coupée to the mouth of White river, and forty leagues into the country west and 30 east from the Wabash, excluding only the land immediately around the town, which had before been granted to the amount of 20,000 or 30,000 acres. (Am. State Papers, Pub. Lands, Vol. I, 123.)

Hundreds of thousands of acres of these grants were bought up by speculators and resold at frivolous prices, "1,000 acres being frequently given for an indifferent horse or a rifle-gun," and "a formal deed made reciting the grant by the court" and duly recorded. General Harrison indignantly forbade "the recorder and prothonotary of the county from recording or authenticating" any of these deeds, "being determined that the official seals of the Territory shall not be prostituted to a purpose so base as that of assisting an infamous fraud."

CORRUPT RECEIVERS OF PUBLIC MONEYS—WHOLESALE DEFALCATIONS—PLUNDER OF GOVERNMENT AND SETTLER.

At the third session of the Twenty-fifth Congress the House of Representatives, of which the Hon. James K. Polk, of Tennessee, was chairman, appointed by ballot a select committee of nine members, with instructions "to inquire into and make report of any defalcations among the collectors, *receivers*, and disbursers of the public money which may now exist; who are the defaulters, the amount of defalcations, the length of time they have existed, and the causes which led to them."

Hon. James Harlan, of Kentucky, a statesman of marked ability and of high and irreproachable character for independence and integrity, was appointed its chairman, and its report, which was made on February 27, 1839, is House report No. 313, Twenty-fifth Congress, third session. Part IV of the report of the majority of the committee is confined to "Defalcations among receivers of public moneys." The committee prepared and printed two statements, compiled from the official reports of the Secretary of the Treasury to the House at previous sessions, the first of which embraces the names of defaulting receivers, sixty-six in number, prior to 1837, with the balances or amounts due from each of them to the government (pp. 143, 144), and the second is as follows. on page 145:

Additional statement relative to the receivers of public money.

[Prepared in pursuance of the resolution of the House of Representatives, dated the 11th of January last (1839), requiring the Secretary of the Treasury to report what defaultions by receivers "have taken place since the first day of October, 1837, the names of the defaulters, when and where they took place, and what amount," not heretofore reported.]

Receivers.	Land district.	Apparent balance.	Credits claimed.	Contested balances.	Date of balances.
Paris Childress.....	Greensburg, La.....	\$12, 449. 76	\$312. 01	\$12, 449. 76	1838
John H. Owen.....	St. Stephens, Ala.....	30, 611. 99	1, 581. 45	30, 611. 99	1838
William Linn.....	Vandalia, Ill.....	55, 962. 06	2, 988. 35	55, 962. 06	1838
Samuel T. Scott.....	Jackson, Miss.....	12, 550. 47	11, 320. 90	12, 550. 47	1838
James T. Pollock.....	Crawfordsville, Ind.....	14, 891. 98	59. 31	14, 891. 98	1838
John L. Daniel.....	Opelousas, La.....	7, 280. 63	577. 42	7, 280. 63	1838
Morgan Neville.....	Cincinnati, O.....	13, 781. 19	229. 27	13, 781. 19	1838
M. J. Allen.....	Tallahassee, Fla.....	26, 691. 57	2, 080. 72	26, 697. 57	1839
Robert T. Brown.....	Springfield, Mo.....	3, 600. 50	426. 73	3, 609. 50	1839

Whole amount due from land receivers who are on the list of defaulters	\$1, 073, 837. 41
Of which there accrued prior to 1829	\$248, 159. 13
Since that time	825, 678. 28
	1, 073, 837. 41

The committee also "reported specially" the correspondence "between fifteen of the individuals whose names appear" in its statements as defaulters and the Treasury Department, "as examples merely of the manner in which the President of the United States and Secretary of the Treasury have executed the laws in respect to the public money and other property of the United States in the hands of this class of public officers, and in respect to their own official duty."

The demoralized condition of the land service at this time in the several land States, which this humiliating correspondence exposes, it would be most difficult to fully describe. The correspondence begins with a letter of R. H. Sterling, receiver, dated at "Chocehuma, Miss., November 26, 1833," to Secretary of the Treasury R. B. Taney, and continuing over a period of about four years, closes with a letter dated "Treasury Department, November 11, 1837," from Secretary of the Treasury Levi Woodbury to receivers in Illinois, Mississippi, Michigan, Indiana, Arkansas, and Florida, notifying them that their monthly returns of money received were in arrears. Among the earliest from the Secretary to delinquent receivers are the following:

TREASURY DEPARTMENT, *February 7, 1834.*

SIR: It has been represented to this department that some of the receivers of public money in Mississippi have been engaged in trading on the bank-notes they receive in payment of public lands by exchanging them for bank-notes of inferior value. I hope that there may be some mistake in this business, as it is my duty to state to you that such conduct would be regarded by this department as a gross violation of official duty, and be treated accordingly. But as such statement has been made from the most respectable authority, I must ask whether you have engaged in any such use of the public money received by you, and request a prompt answer to this inquiry.

I am, etc.,

R. B. TANEY,
Secretary of the Treasury.

TO RECEIVERS OF PUBLIC MONEY at Augusta, Mt. Salus, Washington, Chocehuma, and Columbus.

[Circular.]

TREASURY DEPARTMENT, *February 28, 1835.*

SIR: It has been intimated to the department that a practice prevails at some of the land offices of permitting entries and issuing certificates of purchase without the payment of the purchase money at the time of the entry. Such a practice being unauthorized and highly reprehensible, I have deemed it proper to make known to you

that, if it has been tolerated by you, it must immediately cease; and any repetition of it hereafter coming to the knowledge of the department will receive prompt and exemplary notice.

I can not omit the occasion to impress upon you the necessity of a strict attention to and punctual compliance with the duties required of you in regard to the prompt deposit of public moneys and transmission of your accounts and returns; and to say to you that the performance of those duties must be regarded as paramount to all others in your official station.

I am, etc.,

LEVI WOODBURY,
Secretary of the Treasury.

TO RECEIVERS OF PUBLIC MONEY at Cahaba, Huntsville, Montgomery, St. Stephen's, Augusta, Chocchuma, New Orleans, Ouachita, Demopolis, Mardisville, Sparta, Tuscaloosa, Columbus, Washington, Opelousas and St. Helena.

TREASURY DEPARTMENT, *February 4, 1836.*

SIR: Your returns for the months of October, November, and December have not been received. I regret that there should be any occasion to notice the neglect or accident, as the case might be, in this important duty; and avail myself of the occasion to inform you that unless your future returns are received at the department within the month next succeeding that for which the return is rendered it will place me under the disagreeable necessity of reporting the fact to the Executive in order to comply with the general rule in this class of cases.

I am, etc.,

LEVI WOODBURY,
Secretary of the Treasury.

TO RECEIVERS at Palmyra, Mo., October, November, and December; Edwardsville, Ill., November and December; Quincy, Ill., November and December; Shawneetown, Ill., October, November, and December; Cahaba, Ala., November and December; St. Stephen's, Ala., November and December; Columbus, Miss., November and December; Mount Salus, Miss., November and December; Helena, Ark., December; Washington, Ark., December; Zanesville, Ohio, December; Vincennes, Ind., December; Chicago, Ill., December; Galena, Ill., December; Vandalia, Ill., December; Tuscaloosa, Ala., December; Augusta, Miss., December; Chocchuma, Miss., December; New Orleans, Ouchita, and St. Helena, La., December; Green Bay, Mich., December; Batesville, Ark, December.

And so on, repeated again and again, throughout the whole period covered by the correspondence; and in every case, after most "liberal delay," the toleration of "excuses" which "the department can not recognize," the Secretary was finally "constrained by continued neglect" to cause the removal of the delinquent receiver. Speculation in lands and government funds prevailed as an epidemic. The war by the national administration on the Bank of the United States, recognized at the time as "the fiscal regulator" of our currency, and the notes or issues of which were at par the world over; the arbitrary removal by the President of the government deposits from the vaults of the bank; the multiplication of "wild-cat" and "red-dog" currency; the explosion of the so-called "pet banks," the "bogus banks," in which were placed the government deposits withdrawn from the Bank of the United States, and the famous Treasury circular requiring all payments for public lands in gold or silver, all combined to open wide the fields of speculation.

"Land-grabbing," speculation and peculation, were reduced to a system. One of the deplorable results was this general demoralization of our land service. The actual settler or homeseeker was fleeced unmercifully by the agents of the government and their confreres of the speculating land rings, and the government itself systematically plundered by receivers long retained in office after their delinquency had become notorious.

In the case of W. P. Harris, receiver at Columbus, Miss., a case which may be cited as an example, the correspondence extended from January 15, 1834, to November 19, 1836, over a period of nearly three years, during which his delinquency was well known. Some of the "powerful reasons" or causes which induced "liberal delay" in his case may be learned from the following appeal to the President on behalf of Harris by his Representative in Congress:

COLUMBUS, September 15, 1835.

DEAR SIR: Many of the early and constant friends of the administration in this State have heard with much regret and sorrow that the present receiver of public moneys at this place is to "consider himself dismissed unless his returns are made before the 1st of October."

I have long had the honor of an intimate acquaintance with General Harris, and I can freely assure your Excellency that a more honorable man does not live; unblemished in all the relations of life, and standing high in the estimation of the public. He has served here for many years in the most responsible and dignified stations, and no man enjoys in this State a more diffused and deserved popularity.

I am very well informed as to the management of the office. I reside in the district and know that he is the most indefatigable business man in the State. Since he received the appointment he has been absent but once, and then only for a few days. Day and night he is there. The people speak of this everywhere. He has constantly had three and now four clerks at work, who, in my own knowledge, have been engaged from sunrise until ten at night, and he cannot obtain them for less than \$50 per month. His receipts must have been between \$1,200,000 and \$1,400,000 and the labor for the ensuing six months will be arduous in the extreme. I know that the receiver suffered under great inconvenience for two or three months, being without abstracts, which were not obtained from Washington until he had written three or four times, and even then were much delayed by the extraordinary failure of the mails. From my knowledge of the business of the office I do not think it possible that the receiver can accomplish his returns by the 1st of October, though every exertion will be made and *has been* made to keep up with the business. I have known the receiver and his clerks to be at work, time after time, until after 1 o'clock at night; and the strongest testimonials from the best and most influential friends of your Excellency can be had as to his integrity and industry. General Harris has never engaged in speculation either directly or indirectly.

Poindexter [the anti-Jackson United States Senator from Mississippi] employed a vile, unprincipled agent (Gibson Woodbridge) to take testimony at this office under a resolution of the United States Senate, and he endeavored to implicate General Harris and George W. Martin in some transaction of very *minor* importance. If I had been examined I could have explained the whole matter to the entire exoneration of General Harris, and I could have explained the whole transaction as it regards Colonel Martin to the satisfaction of the world. The fact is, it was a miserable attempt on the part of Poindexter to strengthen his party here. He hates Colonel Martin with the malignity of a demon; and nothing would rejoice him more than the expulsion of General Harris, whom he knows to be one of the main pillars of the Democratic cause and one of the earliest and most distinguished friends of the administration in Mississippi. His family and connections are extremely influential, and all of them are co-operating with us in the arduous struggle which we are now making. They are true Democrats, and the Bank, Nullifying, and White parties would shout "victory" at any blow aimed at them.

We are now in the midst of an electioneering campaign. General Runnels, R. J. Walker, Maj. B. W. Edwards, and myself constitute the Democratic Van Buren ticket. It will be a close contest. The Nashville papers circulate extensively through our State. Much of our population is from Tennessee; nine-tenths of our newspapers are for White, and every bank in the State, including the United States branch, has taken commission in his service. Some three or four thousand of our voters are recent emigrants from other States, and reside in the new counties, knowing nothing of our political arrangements; and as we have no mails circulating among them the result as to them is very doubtful.

With high respect, I remain your Excellency's most obedient servant,

JOHN F. H. CLAIBORNE.

To His Excellency the PRESIDENT OF THE UNITED STATES.

Nevertheless, after a most "liberal delay," Harris, on August 27, 1836, was "constrained" to resign, and the entry made on the books of the Treasury: "Balance due from Mr. Harris \$109,178.08." In his letter of resignation Harris "takes the liberty of recommending Col. Gor-

don C. Boyd, of Attala county," as his successor. In the October following Colonel Boyd was appointed. Within two months, in December, the Secretary's complaints about his delinquent monthly returns began, and continued till July 24, 1837, when Boyd, in a letter to Secretary Woodbury, ingenuously declares: "The truth is, I am in default." Boyd also was "constrained" to resign, and the fact entered on the books of the Treasury: "G. D. Boyd indebted \$50,937.29 as per last settlement at the Treasury." Among his assets was "a principality" but recently a part of the public domain.

Previously M. V. M. Garesche, a Treasury agent, had examined the office at Columbus. In his report, dated June 14, 1837, he urged:

The man [Boyd] seems really penitent, and I am inclined to think, in common with his friends, that he is honest, and has been led away from his duty by the example of his predecessor [Harris], and a certain looseness in the code of morality which does not move in so limited a circle as it does with us at home.

Another receiver would probably follow in the footsteps of the two.

You will not therefore be surprised if I recommend his being retained in preference to another appointment; for he has his hands full now and will not be disposed to speculate any more. * * * He has, moreover, pledged his word that, if retained, he will strictly obey the law, and receive nothing but specie in payment for lands. * * * Lenity towards him, therefore, may stimulate him to exertion which severity might perhaps paralyze.

This correspondence speaks for itself: it needs no comment.

In a report of a previous committee, of which the Hon. Henry A. Wise, of Virginia, was chairman, some additional facts were developed as to the corrupt practices of receivers. Col. John Spencer was receiver at Fort Wayne, Ind. Mr. Nathaniel West, jr., appointed by Secretary Woodbury on June 26, 1836, to examine the condition of the office at Fort Wayne, reported:

Upon the subject of using the money of the United States I beg leave to state that I find it universally stated and believed, and it is conceded to *as a fact* by the clerks in the receiver's office, that both he and his relative Dawson have been much in the habit in the office of shaving money; that is, exchanging the money which could not be received for public lands, the rate of exchange or discount varying from 3 to 5 per cent. I find in the case of Isaiah Wells, of Marion county, Ohio, that so recently as the 6th instant he paid into the hands of the receiver in his office \$8 for exchanging \$240 of Ohio bank-notes of \$5 each. To what extent this shaving business has been carried on in the office of course I do not know, but I am satisfied it has been to a very considerable extent; and that the government money paid in by one person has been handed out by the receiver in exchange for uncurrent and not land-office money, he receiving for his own private use the discount as agreed upon, and that the same government money again is passed into the land office to be again used for the like purpose in pay for the public lands; that the receiver has taken in bank-notes of \$5, contrary to orders, the schedule prepared at his office, herewith inclosed, will prove; that he received a bonus for taking the same is, I think, almost beyond a doubt.

Among Colonel Spencer's "excuses" or appeal for "liberal delay" was the following:

RECEIVER'S OFFICE, Fort Wayne, October 27, 1836.

SIR: This is to inform you that I have forwarded to the deposit bank \$104,000 in silver, there to remain until I arrive with the gold and paper money.

My Democratic friends think that I ought not to leave until after we hold our election for President on the 7th of November, which I have concluded to await, and shall leave on that evening or the next morning to deposit, with all the funds on hand up to that time. I shall write you again before I leave. The sales are rapid—mostly paid in gold and silver. My quarterly report will be forwarded by next mail for last quarter, which ought to have been done sooner, only for the want of help in the office. Hereafter, I think, I can get my reports off without much delay after the close of the month and quarter.

I am, yours, respectfully,

JOHN SPENCER,
Receiver.

Hon. LEVI WOODBURY,
Secretary of the Treasury.

Hon. William Hendricks rushed to the rescue. He urged :

MADISON, August 31, 1836.

SIR: I am informed that some things are stated recently to the prejudice of Col. John Spencer, receiver at Fort Wayne, and I am requested to write you.

In doing so I can only say that I am gratified in learning that his deposits have been made to your satisfaction; and if so, I hope that minor matters, if mere irregularities, will be overlooked. He is reputed to be an honest and honorable man, and I do not believe that he has intentionally either done wrong or violated his instructions. It would to some extent produce excitement if he were removed, for he has many warm and influential friends both at Fort Wayne and in Dearborn county, from which he removed to his present residence. *Better let it be.*

With much respect,

WILLIAM HENDRICKS.

HON. LEVI WOODBURY,
Secretary of the Treasury.

And Secretary Woodbury responded :

TREASURY DEPARTMENT, September 7, 1836.

SIR: Your letter of the 31st ultimo is received, and I am happy to inform you that Mr. Spencer's explanations have been such that he will probably continue in office.

I am, very respectfully, your obedient servant,

LEVI WOODBURY,
Secretary of the Treasury.

HON. WILLIAM HENDRICKS,
Madison, Ind.

Corrupt "corps" were openly organized and defiantly operated their infamous schemes of systematic swindling. All competition at sales of public lands was defeated, and the settler and the government were alike plundered of lands and money. Mr. Owen, of Georgia, in his report from the Democratic minority of the Harlan committee, was compelled to declare: "That the country has sustained great pecuniary loss no man can deny; that the national character has suffered deep humiliation and disgrace no man can hesitate to admit."

OUR RAILROAD POLICY SINCE 1861.

During a tremendous war in which the life of the nation was perilously menaced, when every dollar at the command of the national government, however obtained, whether by taxation or loan, was exacted by the enormous expenditures necessary for the maintenance of the Union, Congress, in obedience to the voice of the American people, as expressed at the Presidential election of 1860, granted certain areas of the public lands to corporations in aid of the construction of the great Pacific railroads and their connections.

Notoriously, our whole people in 1860 were in favor of constructing a railroad to the Pacific ocean. Its absolute necessity had long been felt. For years, as far back as 1814, and even prior, its construction had been advocated by our greatest practical minds as a grand national necessity—as a means of uniting the eastern and western oceans and of securing to our people the vast commerce of Asia. Congress had authorized and completed at a heavy expenditure surveys of the different proposed routes, and had published the results of those surveys in a series of quarto volumes. In 1856, and subsequently in 1860, the two great antagonistic political parties dividing the nation agreed at least

in the one measure contemplating and advocating its construction—in pledges in 1860 that each, if successful, would speedily build it.

In 1861 formidable, apparently almost insurmountable, difficulties confronted the nation. Assailed by a stupendous internecine war encouraged by a hope of European intervention which menaced our national government, that government without funds or foreign credit, the construction of this Pacific road appeared to the average statesman practically impossible. Notwithstanding such tremendous obstacles, President Lincoln and Congress resolved on its construction. Plans were proposed and discussed. Should the government aid in building this great auxiliary of commerce? It was plain that it could not otherwise be constructed. Where, in addition to its immense annual expenditures in maintenance of our vast armaments on land and sea and our necessarily increased civil establishment, was the required capital for its construction to be obtained? That was the important and prodigious problem involved. Heavy taxation of almost every article of domestic product and of foreign imports, the issue of bonds and greenbacks, hundreds of millions, were exacting all the financial resources of the people, and were only submitted to during the war by a great sense of national danger, supported by an unconquerable spirit of patriotism, and a high sense of honor and justice which acknowledged the liquidation of the liabilities of that war as an imperative duty which could neither be honorably evaded nor honorably postponed. The building of the road directly by the government, therefore, was practically impossible. Nor was it regarded by many as wise policy for the government to build it even if financially able. Consequently, after the widest and most exhaustive discussion, it was determined that its construction was only practicable through grants of the public lands. Numerous petitions, extending in dates back to 1844 and prior, had urged upon Congress the propriety of such grants in its construction, and the Congress resolved to adopt that policy: the necessary grant was made and the great Pacific road built.

Now, the grand stipulation of the cession by the States of our original public domain was that the lands ceded should be held in trust by the federal government for "the common benefit of the United States." In pursuance of that trust, and in pursuit of "the common benefit," the representatives of the States ceding the domain, the donors themselves, both in Congress and the executive government, like Washington and Hamilton and Madison, established the precedent of granting public lands to private corporations,* millions of acres, even for speculative purposes, but principally as a means of aiding in the settlement or population of our "vacant western lands." Unfortunately, for the honor of our government, in subsequent periods of our history, but prior to 1861 (as hereinbefore shown †), corrupt combinations, swindling "corps" or "syndicates," through fraudulent practices, not merely for private speculation in, but for the spoliation of, our public domain, involving the great body of the principal officers of our land service, were recognized or long tolerated by our executive government with the knowledge of Congress. But in granting public lands to corporations in aid of the construction of our Pacific roads, Congress, in following this precedent of our Revolutionary sages, were governed, as were our sires, only by the highest consideration for "the common benefit." In those grants there was no corruption involved or contemplated, no schemes for merely private profit, no proposed spoliation of the public domain for individual speculation: they were grants in eminent trust in aid of a

* See *ante*, pp. 71 and 72.

† See *ante* pp. 73-78.

grand, long-needed national enterprise, the beneficence of which was to enrich, not the corporations building the roads, nor merely the people of the States through which the roads were to run, but our whole people of all the States: they were eminently for "the common benefit."

Up to the close of the last fiscal year an aggregate of only 13,456,796.78 acres of the public lands had been certified or patented to these corporations, while under grants to the States for railroad purposes 37,557,380.58 acres had been certified. In those railroad grants prior to 1861 the alternate sections of land along the line of the road were reserved by the government and the double minimum price of lands (\$2.50 per acre) was exacted from the settler, thus compelling the poor settlers to repay the government for lands donated for railroad purposes. But under the later grants, subsequent to 1861, to corporations for railroad purposes, these alternate sections, greatly enhanced in value by the building of the roads, were opened without price to the homestead settler. Thus the actual homesteaders, thousands in number, were also the beneficiaries of this most liberal and just provision of our land laws.

In 1860 the aggregate railroad mileage of the United States was only 30,793.67 miles, with only 73.85 miles in the Pacific States, but on January 1, 1888, our railroad mileage, stimulated and supported by the building of these Pacific roads, had increased to 153,056 miles, while the mileage of our telegraph lines, following our railroad construction, had increased in 1888 to 231,588 miles. A most marvelous advance! Of this extended railroad construction, our Pacific or land-grant routes, from a mileage of 73.85 miles in 1860, had, on June 30, 1889, increased to 18,030.71 miles of splendid roads, the finest in the world, valued at thousands of millions, constituting ever-active sources of our business prosperity, and connecting with the other roads of the country, reaching out in every direction, united the Atlantic and Pacific, and consolidated in indissoluble bonds our States and Territories in one compact and powerful nation.

The value of our internal trade has had a like marvelous advance. It aggregates now thousands of millions annually, many times larger than our foreign commerce, and greater in value than the aggregate international commerce of the world. All facilities of transit or travel have been greatly augmented, encouraging the building of towns and cities, thriving and growing manufacturing and commercial marts, and the creation of new States, by the advance and concentration of population and trade, stimulating and rendering profitable the development of the natural and industrial resources of the country, multiplying remunerative employments, and consequently increasing the comforts and happiness of hundreds of thousands of our industrial people, enriching the North and South equally with the East and West, not merely by the exchange of native products, but by pouring into their great commercial centers the lucrative trade of Asia and the Pacific islands. All, indeed, are the beneficiaries of this splendid prosperity and progress.

These are the magnificent results, the wonderful fruits, of this great national railroad policy. Has not "the common benefit" been grandly served? Do not such results demonstrate in the founders of that policy and its supporters a patriotism and genius, a fearless and sagacious statesmanship, under unequalled difficulties, never matched in ancient or modern times? Was it not a policy which in history will illustrate for all time the magnanimity and intelligence of President Lincoln and his supporters, and forever form one of the grandest monuments of our national greatness and glory?

THE HOMESTEAD POLICY AND ITS BENEFICENT RESULTS—ANTECEDENT LAND POLICY.

The disposition of our public domain has been greatly influenced by the attitudes of political parties. The two great parties which, prior to 1861, divided the nation, finally assumed positions on the land question, involving that of slavery, which resolved the country into antagonistic or hostile sections. The one party, dominated by what was called the "proslavery propaganda," contended for the appropriation of our public domain to the purposes or uses of slavery. "No more free States" was their declared policy. At the same time they demanded more territory, a wider domain, for the enlargement of the boundaries and political power of their "peculiar institution."

This contention began as early as the proposed admission of Missouri as a State into the Union. At that date Texas was a wilderness, a province of Mexico, inhabited almost wholly by Indians; and Mexico, establishing its independence of Spain in 1821-'22, soon after abolished slavery and established freedom as the rule of the Mexican States. This action of Mexico apparently fixed a southern limit to the expansion of the "peculiar institution." The "proslavery propaganda" rebelled. They demanded "more room." Under their influence our citizens of the South and Southwest crossed with their slaves into Texas, seized on its lands, re-established slavery on its free soil, threw up the standard of revolt, coerced the separation of Texas from Mexico, and intrigues were begun looking to its annexation to the American Union. Its admission was long successfully resisted. Principally through the influence of our Secretary of State, Hon. John C. Calhoun, in 1844-'45, the "propaganda" succeeded: Texas, recognizing slavery in its constitution, was annexed to the Union.

It retained its vacant or unsettled lands as the property of the state, opening land offices under its own laws for their sale, and demanded of the United States \$16,000,000 as indemnity for claims to certain lands in New Mexico and elsewhere. Its demand was acquiesced in and paid as one of the so-called "compromise measures of 1850."

But the "propaganda" were insatiable. They still demanded "more room." Mexico was consequently coerced into the war of 1847-'48; California, New Mexico, and other Mexican territory were seized and added to our public domain.

Over the spoils of Mexico sectional strife raged violently and bitterly. The "propaganda," with characteristic arrogance, demanded the lion's share. Nor did that claim satisfy their demand for more territory. The Missouri compromise was repealed. The doctrine of "manifest destiny" was promulgated. Spain was importuned by offers for the purchase of Cuba. The notorious "Ostend manifesto," issued by the American envoys to England, France, and Spain, fulminated its project for the acquisition of Cuba, and filibustering expeditions, fitted out in our ports, sailed in pursuit of conquests. The agitation in Congress and the country culminated in actual and sanguinary civil war in Kansas Territory.

Hon. John Quincy Adams, in the House of Representatives, as early as at the first session of the Twenty-fourth Congress, on a proposition to cause rations to be distributed to suffering fugitives from Indian hostilities in Alabama and Georgia, declared:

It is said that one of the earliest acts of this administration was a proposal, made at a time when there was already much ill humor in Mexico against the United States, that she should cede to the United States a very large portion of her territory, large

enough to constitute nine States equal in extent to Kentucky. * * * It is further affirmed that this overture, offensive in itself, was made precisely at the time when a swarm of colonists from the United States were covering the Mexican border with land jobbing, and with slaves, introduced in defiance of Mexican law by which slavery had been abolished, etc.

And under its land policy within the Union, or rather under the practices of those national administrations in which the "propaganda" dominated (from 1829 to 1861,) "land jobbing," "land grabbing," by unlawful "corps or combinations," "syndicates," and the embezzlement of the proceeds of the sales of public lands (as hereinbefore shown), disgraced and humiliated the nation.*

Up to this period of our history there was no limitation by law to the amount of offered public land that might be procured by private entry. It frequently occurred that many thousand acres were entered at the minimum price (\$1.25 per acre) for purposes of speculation by individuals and corporations. In that way and under this policy the richest portions of the public domain in all the western States were rapidly passing from the reach of actual settlers, and large holdings were becoming the rule of our national advancement. A landed aristocracy was being fostered, a condition of things that has cursed the countries of the Old World, greatly to be dreaded in this, and to be averted if possible.

At this juncture the majority of our people revolted against the policy then prevailing. Its representatives, taking possession of the federal government in 1861, resolved that our public domain in future should be held for "the common benefit," and the purposes or uses of freedom and industrial and national progress. A principal measure in that new line of policy was the homestead law. At every previous stage of the struggle for the adoption of the homestead policy the "propaganda" had made a fierce sectional resistance. For several years immediately prior to 1861 a great question of the day was, "What shall be done with our public domain?" Shall it be open to monopoly by speculators, be used to build up a landed aristocracy, or be reserved to actual settlers at a nominal price or without price? Did the "propaganda" ever encourage or favor the settlement of our public lands under "the free homestead principle?"

On January 20, 1859, in the House of Representatives, a bill reported from the Committee on Public Lands, Mr. Grow, of Pennsylvania, proposed to amend by adding the following section:

Be it further enacted, etc., That from and after the passage of this act no public land shall be exposed to sale by proclamation of the President unless the same shall have been surveyed and the return of such survey duly filed in the land office for ten years or more before sale.

The object of this amendment was to defeat the schemes of the monopolists by discouraging speculation in our public lands, and to secure to pre-emptors, to the poor and industrious settler, ample time, ten years or more, in which "to clear up" his farm, pay for it from the proceeds of the soil, and thus rescue him from the ruinous usury of the money sharks, in borrowing from whom he was compelled to mortgage his land. The practical effect of this amendment would have secured to pre-emptors, actual home-seekers, the bulk of the public lands. Against a measure so beneficent and certain in its results to be productive of wealth and power to the nation the "propagandists," the southern landed aristocracy, indignantly rebelled. Previously, at the first session of the Thirty-fifth Congress, Mr. Grow had proposed a similar measure, giving the pre-emptor *fifteen* years in which to pay for his farm. Both

* See ante, pp. 73-78.

measures were, however, defeated by the "propaganda." In the House, Mr. Cavanaugh, of Minnesota, declared:

Isay it frankly, I say it in sorrow, that it was to the Republican side of this House to whom we were compelled to look for support of this just and honorable measure. Gentlemen from the South, who have broad acres and wide plantations, aided here to-day by their votes more to make Republican States in the North than by any vote which has been cast within the last two years. These gentlemen come here and ask us to support the South; yet they, to a man almost, vote against the free, independent labor of the North and West.

I, sir, have inherited my democracy; have been attached to the Democratic party from my boyhood. * * * But, sir, when I see southern gentlemen come up, as I did to-day, and refuse by their votes to aid my constituents, refuse to place the actual tiller of the soil, the honest, industrious laborer, beyond the grasp and avarice of the speculator, I tell you, sir, I falter and I hesitate.

On the 1st of February the question of the public lands was again brought before the House by bill H. R. 72, to secure homesteads to actual settlers. Every parliamentary strategy was resorted to by the "propagandists" to defeat this homestead measure, but it was nevertheless passed by a vote of yeas, 120; nays, 76. Twenty-nine northern Democrats were compelled under pressure from their constituents to vote for the measure, but six voted with the solid phalanx of the southern landed "propagandists."

On February 17, in the Senate, Mr. Wade, of Ohio, moved to postpone all prior orders and take up the homestead bill which had thus passed the House. A characteristic debate ensued. Senator R. M. T. Hunter, of Virginia, urged: "I hope there will be no effort to press this homestead bill so as to displace the appropriation bills." Only a few weeks of the session remained, and an "extended debate" and the defeat of the appropriation bills were threatened if the homestead measure was pressed. No debate was desired by the friends of the measure: all they wanted was a vote. But a vote was what the "propagandists" did not want, and maneuvered to defeat. Senator Hunter declared: "I do not conceal the fact that I am much opposed to it;" that is, to giving "lands to the landless;" and his colleague, Mr. Mason, declared his intention "to go into it pretty largely, because he had not yet known a bill so fraught with mischief, and mischief of the most demoralizing kind."

Thus the proposed donation of the public lands to actual settlers, to the landless masses as free homesteads, the peopling of our public domain with an enterprising, intelligent, and hardy race, transforming the wilderness into flourishing civilized communities, multiplying new States, and adding immensely to the wealth and productive industry of the nation, was to the "propagandist" mind "mischief of the most demoralizing kind."

Mr. Wade's motion, however, prevailed by a vote of 26 to 23, but only to be immediately antagonized by another motion by Senator Hunter to lay aside the homestead bill and take up another bill. Debate of course followed, in which the morning hour expired, and Vice President Breckenridge decided that the bill for the purchase of Cuba in the interests of the "propagandists" was before the Senate. Whereupon Mr. Wade moved to postpone the Cuba and continue the consideration of the homestead bill. Mr. Wade's motion prevailed. Again the homestead bill was before the Senate, and again Mr. Hunter moved to lay it aside. Senators Wade and Seward, in energetic appeals, exhorted the friends of the measure to stand firm, but Mr. Hunter's motion prevailed. The vote was yeas 28, nays 28, a tie, and Vice President Breckenridge gave the casting vote against the homestead.

Two days subsequent, on February 19, Mr. Wade again moved to set aside all prior orders and take up the homestead bill. The motion was defeated. Again, on February 25, the motion to take up the homestead bill was antagonized by the Cuba bill: the Cuba bill prevailed. After a debate, "an idle debate," protracted far into the night as a means of shutting out the homestead bill, Senators Wade and Seward, at 10 o'clock p. m., made an earnest effort to bring the homestead bill before the Senate. Mr. Seward urged—

After nine hours' yielding to the discussion of the Cuba question it is time to come back to the great question of the day and age. The Senate may as well meet face to face the issue which is before them. It is an issue presented by the competition between these two questions. One, the homestead bill, is a question of homes, of lands for the landless freemen of the United States. The Cuba bill is a question of slaves to the slaveholders of the United States.

And "old Ben Wade," in his brusque way, declared—

I am very glad that this question has at length come up. I am glad, too, that it has antagonized with this nigger question. I have been trying for nearly a month to get a straightforward vote upon this great question of "land for the landless." I glory in that measure. It is the greatest that has ever come before the American Senate, and it has now come so that there is no dodging it. The question will be: "*Shall we give niggers to the niggerless or lands to the landless?*"

The motion to take up the homestead bill was again lost, and no further attempt at that session was made to get it before the Senate.

At the next session, on the 6th of March, in the House, Mr. Lovejoy, from the Committee on Public Lands, reported the Grow bill, "to secure homesteads to actual settlers on the public domain." The bill was referred to the Committee of the Whole. On the motion of Mr. Lovejoy, on Monday, March 12, the bill was taken out of the Committee of the Whole and passed by a vote of yeas 115, nays 65, all the nays but one being from the States in which slavery was recognized and protected.

In the Senate, on April 17, Hon. Andrew Johnson, of Tennessee, from the Committee on Public Lands, reported, as a substitute for the Grow homestead bill which had passed the House, a bill granting homesteads to actual settlers at 25 cents per acre after five years' residence on the land, but not including pre-emptors then occupying the public lands. Mr. Wade moved to substitute the Grow bill, which motion was lost. The Johnson bill, on May 10, passed the Senate. The House refused to concur; the Senate refused to recede, and a protracted conference of the committees of the two houses ensued. An agreement or compromise was reached on June 19 by the House committee accepting the Senate bill with some amendments. Hon. Schuyler Colfax, in describing the points of conflict between the House and Senate bills, "so radical" as to be apparently "incapable of adjustment," and reporting the compromise adopted, declared:

We struggled, of course, to include all young men over twenty-one years who are not heads of families, and to adopt the free homestead principle of the House bill; but on these points the Senate was inflexible, and we took what we did because it was the very best we could get. * * *

Now, Mr. Speaker, I desire to state in conclusion that the compromise we have made on the subject is not in accordance with what I should desire to have passed if I had the power to frame the bill myself, but it is the very utmost we could obtain from the Senate as now constituted. The Senators who served with us on the conference have been notified by me, and also by my colleague (Mr. Windom, of Minnesota), that we regard this as but a single step in advance toward a law which we shall demand from the American Congress, enacting a comprehensive and liberal homestead policy. This we have agreed to as merely an *avant courier*. We shall demand it at the next session of Congress and until it is granted—until all the public lands shall be opened to all the people of the United States; and I state this publicly that no one shall regard us as estopped hereafter because we accepted this half-way measure rather than to allow the whole to fail.

The conference report or compromise was agreed to in both the House and Senate. The "propagandist" leaders smiled mysteriously. Even to such a comparatively puerile measure of relief to our landless citizens they were irreconcilably opposed. But they were under no apprehension of its becoming a law, and had acquiesced in its passage by the Senate only because in the President they recognized a reliable ally. He had previously, in 1859, in their interest, vetoed the bill donating "public lands to the States and Territories" for the establishment of "colleges for the benefit of agricultural and mechanic arts;" and they were apparently well assured that he would veto this so-called "homestead measure." Accordingly even this "half a loaf" was promptly vetoed by President Buchanan.

In effect, in his veto, the President arraigns the provisions of the bill as unconstitutional. Agreeing with and quoting Chief-Justice Taney, Congress, in his opinion, under the general authority "to dispose of," had no power "to give away" the public lands. Besides, the bill was "unjust to the old States;" "unequal and unjust in its operation among the actual settlers themselves," "creating unjust distinctions;" "a boon expressly conferred" on one class, "the cultivators of the soil;" "lays the ax at the root of our present admirable land system," and "will go far to demoralize the people," or, in the language of Senator Mason, of Virginia, it "was fraught with mischief of the most demoralizing kind."

In the Senate, in which the bill originated, the veto was sustained by a vote of 28 to 18, and the bill consequently failed.

Thus, amid demoralizing sectional turbulence and actual sanguinary civil war in the Territories, amid foreign wars of conquest like the "Mexican," "Ostend manifestoes" and other extraordinary and violent measures for the seizure or purchase of Cuba, unlawful raids for the subjugation of Nicaragua and other Central American States, and appeals or agitation favoring "the reopening of the foreign slave trade," all exacting heavy contributions of the people's treasure or blood, or both, and contemplating only the acquisition of more lands, "more room," for the enlargement of the boundaries and political power of the "peculiar institution," and all opposed with equal resolution by the antagonistic free State or progressive forces of the Union: amid this complicated conflict of sectional ambitions or measures, and as a part of them, all efforts to secure to our landless freemen, to actual settlers, free homes on our public domain, were systematically opposed and defeated by the "propagandists" dominating our national government.

In 1861 the scene shifted. Now, all the powers of the federal government were controlled by statesmen of national and progressive ideas. Now, the grand object of government was the enlargement within the Union of the boundaries and political power of free institutions and consequent national and industrial progress. The "propaganda" revolted. For many years they had labored, through characteristic measures, in the attempted acquisition and monopoly of foreign soil, by the conquest and employment in their interest of all the powers of the national government (the judiciary, executive, and legislative), to dwarf the industrial advance of the nation, all growth of political power in the people, all the humanizing forces of civilization, and to build up a powerful slaveocracy capable of dominating or at will wrecking the Union. But they had signally failed. The progressive forces of civilization had mastered and dissipated their schemes, had achieved possession of the national powers, and on all sides were crowding and even menacing their cherished "peculiar institution."

Separation was therefore their only and last recourse. They consequently labored, and truly with an intrepidity and endurance, a chivalry, worthy of a better cause, during four sanguinary years, to establish an independent confederacy, with "slavery as its corner-stone," in which free laborers, whether white or black, or agricultural or mechanical, would have been excluded as proprietors from their lands, public and private.

But at the first regular session of the Congress of 1861-'62 "the great measure of the day and age," the homestead law, securing "homes, lands to our landless freemen," was enacted; and instead of being "fraught with mischief of the most demoralizing kind," its justice and wisdom, its beneficence alike to the States and nation, have been amply demonstrated. According to a very moderate estimate the number of land patents issued up to June 30, 1889, to homesteaders, to actual settlers on our public domain under the homestead act, was 297,208, embracing an area of 74,302 square miles, or 47,553,280 acres, and with other donations of lands to the people comprising an area nearly equaling the aggregate area of the original New England States and that of the great States of New York, Pennsylvania, and New Jersey—an area more than four and a half times greater than that certified up to the same date to corporations since 1861 in aid of railroad construction.

Thus, the land policy established by the statesmen of 1861 has borne all the beneficent fruits anticipated by its authors. Its railroad and homestead, combining with other features of its comprehensive system of measures, all contemplating the settlement of our public domain in free homes by an intelligent, thrifty, and enterprising population, and the rapid and certain development of the natural and industrial resources of the country, equally affecting and enriching all sections of our Union and all classes of our people, adding immeasurably to their prosperity and happiness, and binding all in one compact and homogenous nation, has, by their vast additions to our national resources and wealth and power, established ours as second to none of the great empires of the earth.

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REPORT OF THE COMMISSIONER OF PENSIONS.

DEPARTMENT OF THE INTERIOR,
BUREAU OF PENSIONS,
Washington, D. C., September 3, 1889.

SIR: I have the honor to submit the following report of the operations of this Bureau during the fiscal year ending June 30, 1889, and to invite your attention to the statistical information furnished by the following tables numbered from 1 to 19:

SUMMARY OF TABLES.

Table No. 1 shows that there were at the close of the year 489,725 pensioners, classified as follows: 351,484 Army invalids; 97,590 Army widows, minor children, and dependent relatives; 4,547 Navy invalids; 2,266 Navy widows, minor children, and dependent relatives; 603 survivors of the war of 1812; 9,964 widows of those who served in that war; 17,065 survivors of the war with Mexico, and 6,206 widows of those who served in said war.

There were added to the rolls during the year the names of 51,921 new pensioners, and the names of 1,754, whose pensions had been previously dropped, were restored, making an aggregate of 53,675 pensioners added during the year.

During the same period the names of 16,507 pensioners were dropped for various causes, leaving a net increase to the rolls of 37,168 names.

The average annual value of each pension, at the close of the year, is shown to have been \$131.18. The aggregate annual value of pensions is \$64,246,552.36.

The amount paid for pensions during the year was \$88,275,113.28, an increase in amount over the previous year of \$9,499,251.36.

The total amount disbursed by the agents for all purposes was \$89,131,968.44.

The amount paid to 46,570 pensioners on first payments during the year was \$21,442,349.13; and there remained in the hands of the several pension agents at the close of business on the 30th of June, 9,664 of this class, to whom there was due the sum of \$5,565,270.31.

It will also be seen that during the year there was paid by the pension agents to attorneys, for their services in the successful prosecution of claims before this Bureau, the sum of \$1,363,583.47.

Table No. 2 shows that during the year 16,507 pensioners were dropped from the rolls. The 5,163 widows, minor children, and dependent relatives, whose names have been dropped, are so classified as to show the number of widows with and those without minor children, the number of minor children who were pensioned in their own right, and the number of dependent mothers and fathers; and this table also shows the whole number of pensioners on the rolls with a like subdivision of the widows' class.

Table No. 3 exhibits the amount of appropriations and the balances available for the payment of pensions for the fiscal year 1889.

Table No. 4 exhibits the amount paid out on account of pensions by each agent, under each item of appropriation, as shown by their accounts current. This table also shows a disbursement of \$14,515.72 for the payment of arrears of pensions in cases where the original pension was granted prior to January 25, 1879, and the date of commencement of pension was subsequent to discharge or death. Of the funds to pay this class there remains a balance of \$423,804.99.

Table No. 5 shows the number of pensioners on the rolls of each agency by the several classes, and compares the aggregate number with that of the previous year, showing in each class the net increase or net decrease. It also shows the net increase to the rolls during the year, which, as before stated, was 37,168.

Table No. 6 shows the number of original pension claims filed each year since 1861, the number allowed, and the number of pensioners on the rolls at the close of each year. Since 1861 730,642 claims have been filed on account of disability, and 407,943 claims on account of death alleged to be due to causes originating in the service. The claims of the latter class have been filed by widows, minor children, and dependent relatives. Of the invalid claims 440,097 have been allowed; and of the widows, minors, and dependents, 263,392—a total of 703,489.

Since 1871 79,607 claims for pension on account of service during the war of 1812, which pension was provided for by the acts of 1871 and 1878, have been filed. Of this number 34,751 have been filed by the surviving soldiers and sailors, and 44,856 by the widows of those who served in that war. Only 14 claims have been filed during the past fiscal year by survivors of that war, and only 183 by widows.

It thus appears that in the aggregate 1,246,146 pension claims have been filed since 1861, and that in the same period 789,121 have been allowed. The number of pensioners on the rolls at the close of each year is stated. The amount disbursed on account of pensions since 1861 has been \$1,052,218,413.17.

Table No. 7 shows the different monthly rates of pension paid to army and navy invalids, and to army and navy widows, minor children, and dependent relatives, together with the number of pensioners of these classes and of each of them. It will be seen that there were 123 different rates of pension being paid June 30, 1889.

Table No. 8 gives the location and geographical limits of each pension agency, the name of each agent, and the balance of funds remaining to his official credit at the close of the year. These balances, except arrears, are immediately covered into the Treasury at the close of the fiscal year.

Table No. 9 shows the number of Army invalid claims allowed each year since 1861, classified and arranged so that in each year's allowance it is shown in what years the claims were filed. The whole number of invalid claims filed each year since 1861 is given, and it is shown what percentage of the number of claims filed each year has been allowed.

Table No. 10 shows the amount paid for pensions each year since 1871 to the survivors and widows of the war of 1812, and since 1887 to the survivors and widows of the war with Mexico.

Table No. 11 shows the number of each class of claims on the files of the Bureau at the commencement of the year, the number filed during the year, and the number admitted and rejected during the same period. It also shows the number of each class pending and on the rejected files at the close of the year. A statement is also given as to the number of bounty-land claims filed, allowed, rejected, and remaining on file.

Table No. 12 is a comparative statement of the pension claims of all classes, settled by allowance and rejection each year since 1881.

Table No. 13 shows the issue of certificates from this Bureau during the fiscal year, a grand total of 145,298. This table also shows that during the year 51,921 original certificates were issued.

Table No. 14 shows in brief the operations of the special examination division during the year. It sets forth the number of claims acted upon by said division, the amount recovered and saved, and the expenditure on account thereof, except salaries.

Table No. 15 shows the number of names and addresses furnished to different divisions of this Bureau and to claimants in the consideration of pending claims during the year; a total of 221,616.

Table No. 16 shows the work done by the mail division of this Bureau during the year. It shows that \$6,389.86 were received in money; 11,042 postage stamps were received; 788,143 letters of inquiry were received, and 1,689,191 letters were sent out during the year. This table also shows that 3,025,734 pieces of mail matter were received, examined, and distributed to the proper divisions of the Bureau after being recorded.

Table No. 17 shows the number of each class of Army pensions filed and allowed during the year on account of disability or death from causes originating in the service since March 4, 1861, arranged according to military service.

Table No. 18 shows the number of pensioners in each county of each State and Territory of the United States and each foreign country on the pension rolls June 30, 1889.

The summary of this table shows the number of pensioners in each State and Territory of the United States and in foreign countries on the pension rolls June 30, 1889.

Table No. 19 presents what is regarded as an interesting statement of the names, ages, and post-office addresses of persons still remaining on the rolls who are pensioned as the widows or children of soldiers of the Revolutionary war. It will be seen that there are 27 widows and 2 children.

OPERATIONS OF THE LAW DIVISION.

During the year 2,952 appeals were made to the Secretary of the Interior in pension cases from the action of this Bureau in various matters.

Appeals were sustained in 103 cases, and appeals were rejected in 1,266 cases.

During the same period 431 appeals were made by attorneys in the payment of fees; and appeals of this character were sustained by the Secretary in 28 cases and rejected by him in 268 cases.

The action incident to these appeals was taken in the law division of this Bureau, through which also during the year the sum of \$22,320.91, which had been improperly paid to pensioners and attorneys, was received and deposited in the Treasury for payment to the parties entitled thereto.

RECOMMENDATIONS FOR LEGISLATION.

NEW PENSION AGENCIES.

Special attention is asked to the condition of the pension rolls as shown in Table No. 5 of this report, and particularly to the large number of pensioners which are now being paid at the pension agencies at Columbus, Ohio, Chicago, Ill., Indianapolis, Ind., and Topeka, Kans.; and I am of opinion that something should be done to relieve the strain on the pension agents at these points.

On the 30th of June last there were on the rolls of the eighteen agencies an aggregate of 489,725 pensioners, an average number to each of 27,207. On the rolls of the Columbus agency at that date there were 49,591 pensioners, an excess of 22,384 over the average. On the Chicago rolls there were on that date 41,004 pensioners; on the Indianapolis rolls there were 44,606, and on the Topeka rolls 38,570, all greatly in excess of the average.

When the fact is considered that each of these pensioners is paid four times annually, and that for each payment a voucher and a check have to be prepared, and the latter in every instance signed by the agent himself, some idea will be obtained not alone of the vast amount of labor incident to the agency service, but particularly of the burden which is now placed on the shoulders of the pension agents at the said four places.

With the four quarterly payments, the large number of first payments on new cases and increase cases, and also the fees of attorneys and examining surgeons, it is safe to assume that the pension agent at Columbus, Ohio, is required to sign no fewer than 250,000 checks annually, or 62,500 per quarter, or 694 checks each day, working ninety days each quarter.

The same condition of affairs exists at the other three agencies named, though to a slightly less extent.

I am satisfied that this burden is too much to impose upon any one man, and I am of opinion that the proper relief will be afforded by the

redistribution of the pensioners upon the rolls of these four agencies resulting from the creation of two additional ones.

It is true that the statute (4780, Revised Statutes) authorizes the President to establish agencies for the payment of pensions wherever in his judgment the public interests and the convenience of the pensioners require; but as Congress has for some years past appropriated an amount "for the salaries of eighteen agents for the payment of pensions," thus practically limiting the Executive authority in this regard, it will be seen that Congressional action will be necessary to secure the two new agencies desired, and I earnestly ask that such action be taken.

PENSION AGENTS.

Attention is respectfully invited to the fact that there is no provision of law under which, in the event of the necessary absence by sickness or otherwise of the pension agent from his official duties, such duties may legally devolve on any other person.

To avoid the possibility of such a condition of things it becomes necessary for the pension agents to sign checks in blank and in advance of payments, and often to delegate to irresponsible parties duties which they, by law, alone can perform. I urge, therefore, that the attention of Congress be called to this matter, and I suggest that the following language be enacted into law:

In case of the sickness or unavoidable absence of any pension agent from his office he may, with the approval of the Secretary of the Interior, authorize the chief clerk, or some other clerk employed therein, to act in his place, to sign official checks, and to discharge all the other duties required by law of such pension agent. The official bond given by the principal of the office shall be held to cover and apply to the acts of the person appointed to act in his place in such cases. Such acting officer shall, moreover, for the time being, be subject to all the liabilities and penalties prescribed by law for the official misconduct, in like cases, of the pension agent for whom he acts.

ACT OF JUNE 6, 1874.

I submit that the act of June 6, 1874, should be amended so as to extend the benefits of all pension laws as to rates to all pensioners whose pensions have been granted by special acts passed subsequent to said date. Said act at present limits its application to those who were at that date entitled to pensions under special acts.

DISABILITIES CONTRACTED PRIOR TO MARCH 4, 1861.

Attention is invited to the fact that while existing pension laws provide pension for the widows of soldiers who have died from causes originating in the service since March 4, 1861, without regard to whether such disabilities were contracted in time of war or in time of peace, no statute grants pension to the widow of a soldier who died from a cause which originated in the service prior to March 4, 1861, during a time of peace. The widows of sailors who contracted fatal diseases prior to March 4, 1861, are also unjustly discriminated against for the reason that title to pension exists only provided the sailor died in the service.

I believe that the statutes should be amended so as to abolish these manifestly unjust discriminations.

ACT OF MARCH 3, 1877.

I desire to renew the recommendations of my predecessors that the act of March 3, 1877, be amended so as to grant pension to those who, having participated in the rebellion against the United States, subse-

quently enlisted in the Navy of the United States and were disabled therein. The act referred to confines its operations to those only who under the same conditions enlisted in the Army of the United States.

INEQUALITIES IN RATES.

Among the many inequalities in the rates of pensions as now provided by law attention is invited to the fact that \$18 per month is the highest rate of pension which may be proportionately provided for different degrees of disability, if such disability or disabilities are not equivalent to the loss of a hand or a foot. If, however, a pensioner has lost a hand for which existing law now provides the rate of \$30 per month, and has also received in the service and line of duty an injury of the back, for example, which would alone entitle him to a pension of \$24 per month, he can receive no rate in excess of the \$30 per month for the combined disability resulting from the loss of his hand and his said injury, unless by reason of them he is totally helpless, or so nearly so as to require the constant aid and attendance of another person, for which degree of disability the rate of \$50 per month can now be granted. It will be seen that the pensioner in such a case actually receives nothing for his said injury, as the loss of his hand alone entitled him to the rate (\$30) which is the highest allowable rate under the law for both disabilities.

Numerous other instances could be cited to show the unfairness in rates now provided by law, and I think the statutes should be amended so as to permit the rate of \$72 per month to be proportionately divided for all disabilities which are shown to have been incident to the service and line of duty.

ADJUSTMENT OF RATES FOR TOTAL HELPLESSNESS.

The injustice and unfairness caused by the act of Congress approved June 16, 1880, should be corrected. This act limits the right of pensioners to receive \$72 per month to those who were receiving \$50 per month at the date of said act. No provision is made therein for granting said rate to those who were totally helpless on said date but were not receiving \$50 at said time, and none for those who have become totally helpless since that date. The anomaly is presented of two men equally disabled, possibly living side by side, the one receiving \$72 per month and the other \$50 per month. To state this case is to make all the argument necessary to show the absolute necessity for an amendment to this act.

ACT OF AUGUST 7, 1882.

I ask attention to the fact that the act of August 7, 1882, which terminates the pension of a widow on account of her immorality, makes no provision for continuing the pension to the minor children of the soldier, in case there are any, when the widow's pension is terminated. Only by the expensive method prescribed in section 4706 of the Revised Statutes can such an end be attained. This statute requires that proof of the immoral character of the widow shall be submitted to a court having probate jurisdiction, and that the court shall certify the facts to the Commissioner of Pensions; but it appears that as the immoral conduct of the widow, on account of which the act of August 7, 1882, provides that her pension shall be terminated, is a question of fact, which may be established without the intervention of a court, no such proceedings should be necessary in order to give title to a minor

child. The act of August 7, 1882, should, I think, be amended so as to provide that when the fact of improper conduct on the part of the widow shall have been established, title to the pension should at once vest in any minor children of the soldier.

INCREASE FOR EQUIVALENT DISABILITIES.

I think the act of August 4, 1886, so far as it provides the rate of \$30 for the loss of a hand or a foot, and for total disability of either, should be amended so as to include the cases of those who are pensioned, not for disabilities in the extremities, but for diseases in other parts of the body, and for causes which this Bureau has already conceded to be equal to the loss of a hand or a foot for purposes of manual labor. No former act increasing the pensions of those who have lost a hand or a foot has ever excluded this class, which is technically known as "equivalents." The very first act (June 6, 1866) which provided a special rate (\$15) for the loss of a hand or a foot provided the same rate for soldiers or sailors "otherwise so disabled as to render their inability to perform manual labor equivalent to the loss of a hand or a foot." The act of June 8, 1872, providing the rate of \$18 for the loss of a hand or a foot, takes equal care to grant this rate to the "equivalents." The act of March 3, 1883 makes no discrimination against them, but also confers upon them the right to receive \$24 per month, in fixing that rate for the loss of a hand or a foot.

I think there can be no question that a man sufficiently disabled by a disease of the lungs, or of the heart, or of the head, to entitle him to \$24 per month is as badly disabled (if he is not more greatly disabled) as a man who has either lost a hand or a foot or has a disability in the hand or foot which totally disables it for manual labor.

INCREASE FOR LOSS OF BOTH FEET AND LOSS OF SIGHT OF BOTH EYES.

It is my opinion that the act of Congress approved February 12, 1889, providing a rate of \$100 per month for the loss of both hands, unjustly discriminates against those pensioners who have lost both feet or the sight of both eyes. No previous legislation has ever assumed that a greater disability resulted from the loss of both hands than from either of the other disabilities stated. Indeed, if legislation is to be taken as reflecting the judgment of Congress, the loss of the sight of both eyes must be regarded as at least an equal disability, for the act of July 4, 1864, provided a special rate (\$25) for the loss of both hands and the same rate for the loss of the sight of both eyes. All subsequent legislation, up to this act of February 12, 1889, placed the loss of sight of both eyes, the loss of both feet, and loss of both hands on an equal footing, and I am sure that it is unjust not to continue them on the same footing. The act of February 12, 1889, should, therefore, in my judgment, be amended to include the loss of both feet and the loss of sight of both eyes, and to grant the rate of \$100 to pensioners who are disabled by either of said causes.

DISPOSITION OF ACCRUED PENSION.

The act of March 1, 1889, in so far as it provided for the disposition of pension due to a pensioner who died without receiving the same, and who left no widow and no minor child, should, I think, be amended so as to avoid the construction which results from the use in said act of the word "hereafter." The effect of the employment of this word has

been to limit the application of this law to cases in which the death of the pensioner occurred after the date of the passage of the act.

Many equally worthy cases have arisen in which the pensioner died prior to March 1, 1889, and to which the principle enunciated in the act of March 1, 1889, should be applied. Many cases of hardship, where friends of pensioners have borne the very great expense of feeding and clothing pensioners and of burying them after death have come to notice, and yet the law (4718 R. S.) applicable to these cases, if the death occurred prior to March 1, 1889, denies the right of these generous and unselfish people to repayment of any portion of such expenses, except so much as is necessary to pay the expenses of the last sickness and burial. If the principle is correct in one case it is equally correct in all other cases. I think the law should be amended by striking out the word "hereafter" therein, and thus making it applicable to any case in which the pensioner has died, or shall hereafter die, leaving no widow or minor child.

RATES FOR SHOULDER-JOINT AND HIP-JOINT AMPUTATION.

I believe that the rates now allowed for the amputation of an arm at or near the shoulder-joint, or a leg at or near the hip-joint, are not commensurate with the degree of disability which the pensioner who has lost either suffers therefrom, especially when the use of an artificial limb is impossible or impracticable; and I think that the act of August 4, 1884, granting the rate of \$45 per month for such an amputation, should be amended so as to provide the rate of \$50 per month therefor.

DEPENDENT RELATIVES.

The present state of the law relative to the pensions granted to dependent relatives is far from satisfactory, especially in the case of dependent fathers. In all cases dependence upon the soldier at the date of his death must be shown, and if the father of the soldier was living at that date, proof of the condition of dependence would be likely to show the father's inability to provide a sufficient support for his family. If the condition of dependence did not exist at the date of soldier's death, but arose at some subsequent time, neither the mother nor the father would have title to pension, however great the poverty or the need. Then the statutes do not, in my judgment, deal fairly with dependent fathers in another respect. The arrears act of 1879 gave title to pension to a widow from the date of the soldier's death in the event that she filed her claim prior to July 1, 1880, and gave the same right to a dependent mother under the same conditions; and the act of June 7, 1884, granted title to a widow from the date of soldier's death unconditionally; but no statute has granted the right to a dependent father to receive pension from any date earlier than the mother's death if she survived the soldier.

I believe that the pension due a dependent father should be made to commence from the date of the soldier's death, even though the mother survived the soldier but died without receiving pension, in the same manner as the law now provides that minor children should be pensioned from the date of the soldier's death, provided the widow dies without receiving pension, and even though she had made an application in her life-time. This additional right to a dependent father should of course be conditioned upon his having been dependent on the soldier at the date of his death. I am further of the opinion that in the case of either

a dependent father or a dependent mother, if the condition of dependence arises at any time subsequent to the date of the soldier's death, pension should be allowed from the date at which such dependence is shown to have commenced. And such provision of law should be made equally applicable to dependent brothers and dependent sisters.

PENSIONS TO WIDOWS AND MINOR CHILDREN.

I earnestly recommend that whenever an invalid pensioner dies the usual pension be granted to his widow, or if he leave no widow, then to his minor children, without regard to whether or not his death was due to any cause incident to the service and line of duty.

I am of opinion also that the provisions of existing law which terminate pension to or on account of minor children at the age of sixteen should be amended so as to continue such pension after the said child shall have reached that age in cases where the child is afflicted, and is, in consequence, unable to earn a support.

I ask attention also to the manifestly insufficient sum (\$2 per month) granted by the act of July 25, 1866, to widows for the care and support of such of the minor children of their deceased husbands as are under sixteen years of age. I think it will not be contested that this sum is entirely inadequate for such purpose, and I recommend that such additional pension be increased to \$5 per month; and that it be granted not only to widows who are pensioned and who have minor children, but also to minor children who are pensioned in their own right. The number of minor children now on the rolls is decreasing, and this act of justice will not involve the expenditure of any large sum of money.

PENSIONS TO ALL SOLDIERS WHO ARE NOW DISABLED.

As the war period recedes from us, and age and its attendant infirmities afflict the veteran who served his country faithfully and well a quarter of a century ago, it is a very serious question whether the Government does him justice in limiting the application of the pension laws to those disabilities only which were contracted in the service and line of duty. I earnestly recommend that a pension be granted to every honorably discharged soldier and sailor who is now or who may hereafter become disabled, and without regard to whether such disability is chargeable to the service of the United States or has been contracted since discharge therefrom.

PRISONERS OF WAR AND ARMY NURSES.

I think the statutes should make provision for pensioning all those who performed service during the war as army nurses. Many of them performed such service under very adverse circumstances, and in many cases at great personal loss to themselves. I believe that in no class of those who participated in the war of 1861 was there a higher sentiment of patriotism or of devotion to duty.

Many suggestions have been made for the benefit of those unfortunates who were confined for different periods during the war in Confederate prisons. I believe that the fact of having been so confined should be sufficient to constitute title to pension, and I think the statutes should be amended accordingly.

I learn that the principle stated herein, so far as army nurses are concerned, was favorably acted on during the last session of Congress by the United States Senate, which passed the bill granting pension to such nurses with practical unanimity.

THE FINISHING AND IMPROVING OF THE PENSION BUILDING.

I desire to call special attention to the unfinished condition of the Pension Office building.

The roof of the building has never been completed on the inside. Its present appearance is unsightly, and its condition is a constant menace to those employed in the court beneath. Pieces of the tiling are continually falling and are liable to do bodily injury to the persons of the employes and others engaged in work immediately under the roof.

I recommend an appropriation of \$5,000 to finish lining the roof with corrugated sheet iron, as originally contemplated.

But few doors have been put in the building. In opening the outer doors in winter the cold air rushes in, causes much inconvenience to the unprotected clerks, and gives rise to many complaints from colds and rheumatism. In extremely cold weather it has been found necessary at times to excuse some of the clerks on account of the cold, thereby retarding the work of the office to an unnecessary degree.

I recommend that doors be put in, especially on the first floor, as due to the convenience and health of the employes, and that an appropriation for that purpose be asked for, not to exceed \$10,000.

The walls of the building on the corridors are constantly suffering from disfiguring marks, and the knocking off of the plaster from unprotected corners. The appropriation of \$3,000 last year was large enough for only one-third of the work estimated as necessary for wainscoting the building in a durable manner, and I recommend that an additional sum of \$6,000 be asked for.

In the settlement of claims the papers have to be moved up and down stairs from the first to the fourth story. The combined weight makes tons of freight to be moved every month. In addition, the fourth story is used for store-rooms and repair shops, and it requires, under the present system, the moving of furniture for repair or storage up and down three flights of stairs. A freight elevator would be of great service in saving time and labor, and I recommend that an appropriation of \$4,000 be asked for this purpose.

The construction of a coal-vault near the boiler-room will be in the interest of economy. At present a large part of the coal is stored from 75 to 100 yards from the fire-room, requiring the employment of two men a large part of the winter to wheel the coal to the fire. The coal now covers and bears upon the steam-pipes necessary to heat the building. If any break or leakage should occur, as is likely to happen, delay and extra expense must be incurred to make repairs. I therefore recommend an appropriation of \$2,000 for coal-vaults.

CLERICAL FORCE.

The request for additional force that my predecessor repeatedly made, I feel impelled to renew with all the earnestness it is proper for me to use.

The number of pending claims, as shown by the published reports, has been constantly increasing beyond the utmost power of the office to dispose of them for the past four years, and a notable increase since the 1st of last March. From March 1 to the close of the fiscal year there were filed 35,000 original invalid claims, making 112,000 claims of all classes filed in that period. This was a gain upon the office of over 35,000.

Considering that there are now pending 479,000 claims of all classes, and that it is twenty-four years since the war closed, it seems to me there are sufficient reasons for asking that additional force be put upon this work to enable those entitled to pension to get the benefit of it while they live.

I respectfully recommend that an appropriation for an increased force of three hundred clerks be asked for, and that it be made available at once.

It is absolutely necessary that an additional number of messengers be allowed, as the present force is wholly inadequate to meet the demands of proper and efficient service. The messengers of this Bureau constitute a very important part of its machinery, and I recommend that twenty additional messengers may be appropriated for, the same to be available at once.

Very respectfully,

JAMES TANNER,
Commissioner of Pensions.

HON. JOHN W. NOBLE,
Secretary of the Interior.

TABLE 1.—Number of pensions allowed and increased during the year, with the annual value of all pensions on the roll.

Year ending June 30, 1889.	Pensions allowed and increased during the year.						Dropped from the roll.		Reductions in rate.		Number of pensioners shown by roll June 30, 1889.	Annual value of pensions as shown by roll June 30, 1889.
	Original.		Increase.		Restoration.							
	No.	Annual value.	No.	Annual value.	No.	Annual value.	No.	Annual value.	No.	Annual value.		
Army.....	35,999	\$3,249,852.07	70,194	\$4,452,948.21	1,561	\$129,554.09	9,096	\$1,290,510.04	116	\$13,254.00	351,484	\$44,151,455.82
{ Invalids.....	11,644	1,879,809.09	119	12,052.60	137	18,838.00	3,063	763,431.00	1,990	68,940.00	97,590	15,289,888.04
{ Widows, etc.....	831	87,009.00	831	56,814.00	56	4,437.00	135	32,975.00	2	137.00	4,547	629,571.00
Navy.....	280	50,940.00	11	2,472.00	3	528.00	100	16,936.00	81	2,340.00	2,266	442,978.00
War of 1812.....	8	768.00	7	2,016.00	1	96.00	212	20,256.00			63	57,888.00
{ Invalids.....	181	25,064.00	8	888.00	1	144.00	1,005	144,576.00			9,964	1,434,416.00
{ Survivors.....	1,772	170,112.00	7	2,292.00	1	480.00	772	73,632.00			17,005	1,638,240.00
War with Mexico.....	1,206	116,776.00	1	312.00			104	9,984.00			6,206	597,776.00
Total.....	51,621	5,578,490.07	71,198	4,229,794.21	1,754	154,087.00	16,507	2,352,230.04	2,189	84,569.00	489,725	646,246,552.3

Total amount paid to pensioners on first payments was:

32,061 Army invalids.....	\$12,928,807.65; and there remained on hand June 30, 1889, unpaid.....	6,610 cases in which there was due.....	\$3,412,288.84
9,854 Army widows.....	7,488,149.33	2,491	1,975,982.09
808 Navy invalids.....	312,017.00	123	48,391.15
248 Navy widows.....	207,993.49	60	54,957.83
6 survivors war of 1812.....	3,179.47	1	869.34
160 widows war of 1812.....	112,695.49	31	24,793.69
2,098 survivors war with Mexico.....	235,479.09	197	29,642.29
1,337 widows war with Mexico.....	154,207.64	151	22,117.08
46,570	21,442,349.13	9,664	5,505,270.31

NOTE.—Average annual value of each pension on the roll June 30, 1889, \$131.18. Amount paid as fees to attorneys, \$1,363,583.47.

TABLE 2.—Number of pensioners of the various classes dropped from the rolls during the year, with the cause, and the number of each class on the rolls June 30, 1889.

Causes for which dropped.	Invalids.	Widows, minor children, and dependent relatives.	Classification of widows' roll.							War of 1812.			War with Mexico.			Total number of all classes.
			Widows with-out children.	Widows with children.	Minors.	Mothers.	Fathers.	Brothers and sisters.	Total number of children.	Survivors.	Widows.	Total.	Survivors.	Widows.	Total.	
Loss to the roll:																
By deaths reported	7,097	2,547	925	115	12	1,135	360	.....	326	137	774	931	575	85	660	11,235
By remarriage	.....	336	301	610	.....	22	.....	.....	1,360	.....	2	2	.....	7	7	1,945
Minors by legal limitation	.....	1,053	.....	.....	1,053	.....	.....	.....	6,014	.....	.....	.....	.....	.....	.....	1,053
Failure to claim pension (sec. 4719, R. S.)	497	356	169	4	.....	155	33	.....	13	30	97	127	.....	.....	.....	380
Dropped for other causes	1,657	271	175	20	.....	49	27	.....	57	25	132	157	197	12	209	2,294
Total loss to roll	9,251	5,163	1,573	749	1,065	1,361	415	.....	8,010	212	1,005	1,217	772	104	876	16,507
Number of pensioners on roll June 30, 1889.	355,031	92,856	49,294	13,100	2,956	28,426	6,052	28	21,091	603	9,964	10,537	17,065	6,206	23,271	483,725

TABLE 3.—*The financial operations of the United States Bureau of Pensions for fiscal year 1889.*

	Army pensions.						Navy pensions.		Arrears of pensions.			
	Pensions.	Fees of examining surgeons.	Salary.	Clerk hire.	Rent.	Fuel.	Lights.	Contingent expenses.	Pensions.	Fees, examining surgeons.	Army.	Navy.
Balance arrears fund on hand July 1, 1888.....											\$354,883.11	\$72,994.06
Amount appropriated act June 7, 1888.....	\$9,173,000.00	\$90,000.00	\$72,600.00	\$178,000.00	\$18,200.00	\$750.00	\$750.00	\$16,000.00	\$1,300,000.00	\$10,000		
Amount deficiency appropriation act March 2, 1889.....	8,000,000.00											
Amount transferred from Army fund.....	100,000.00								500,000.00			
Amount transferred from Navy fund.....	641,728.16	7,196.84	666.68	2,538.43	597.33	83.10	184.26	7.27	49,315.28	245	21,864.29	
Amount refunded by agents.....												
Total.....	87,914,728.16	997,196.84	72,666.68	180,538.43	18,797.33	833.50	934.26	16,007.27	1,819,315.28	10,245	376,747.40	72,994.06
Amount of advances to agents.....	87,306,000.00	699,000.00	72,666.68	180,538.43	14,877.34	650.00	675.00	15,480.00	1,745,000.00	8,600	20,000.00	886.00
Amount disbursed by Treasury settlement.....	105,660.90								1,218.43		5,040.47	
Amount transferred to Navy fund.....	500,000.00								100,000.00			
Amount transferred to Army fund.....												
Total.....	87,912,660.90	699,000.00	72,666.68	180,538.43	14,877.34	650.00	675.00	15,480.00	1,846,218.43	8,600	25,040.47	806.00
Balance on hand June 30, 1889.....	2,067.26	298,196.84			3,919.99	183.50	259.26	517.27	3,006.85	1,645	351,706.93	72,098.06

TABLE 4.—Amount disbursed at United States pension agencies during the fiscal year ending June 30, 1889, as shown by accounts current.

Agencies.	Army pensions.						Navy pensions.			Arrears of pensions.		Grand total.						
	Pensions.		Fees, examining surgeons.	Salary.	Clerk hire.	Rent.	Fuel.	Lights.	Contingent expenses.	Total.	Pensions.		Fees, examining surgeon.	Total.	Army.	Navy.	Total.	
Augusta.....	\$2,456,318.11	\$16,387.95	\$4,000.00	\$4,000.00	\$380.00	\$97.38	\$17.40	\$403.81	\$2,511,004.65	\$329,994.52	\$2,279.05	\$332,273.57	\$1,238.00	.....	\$1,238.00	\$2,512,842.65	.....	.....
Boston.....	4,639,031.23	21,645.13	4,000.00	10,889.84	.....	.....	.....	532.25	4,687,138.44	.....	.....	.....	984.51	.....	984.51	5,220,401.55	.....	.....
Buffalo.....	4,899,779.52	25,506.43	4,000.00	10,086.00	.....	.....	.....	1,246.38	4,940,718.33	.....	.....	.....	163.80	.....	163.80	4,940,882.13	.....	.....
Chicago.....	7,199,996.46	44,308.81	4,000.00	16,000.00	.....	.....	.....	1,500.00	7,165,545.27	294,994.91	1,700.00	296,694.91	2,375.07	.....	2,375.07	7,464,575.25	.....	.....
Columbus.....	9,425,954.62	70,375.39	4,000.00	16,949.81	.....	.....	.....	1,399.74	9,516,678.96	.....	.....	.....	90.00	.....	90.00	9,516,768.96	.....	.....
Columbus.....	2,636,248.54	15,681.33	4,000.00	5,498.00	570.00	.....	.....	674.60	2,662,652.47	.....	.....	.....	.....	.....	.....	2,662,652.47	.....	.....
Concord.....	4,945,626.40	41,693.69	4,000.00	7,500.00	1,190.00	.....	.....	940.54	4,962,439.63	.....	.....	.....	.....	.....	.....	4,962,439.63	.....	.....
Des Moines.....	4,412,654.64	34,623.45	4,000.00	7,500.00	1,200.00	150.00	89.10	725.00	4,491,912.19	.....	.....	.....	311.53	.....	311.53	4,492,223.72	.....	.....
Detroit.....	8,335,557.00	69,176.28	4,000.00	16,700.00	1,600.00	.....	.....	1,250.00	8,428,383.28	.....	.....	.....	1,162.54	.....	1,162.54	8,428,383.28	.....	.....
Indianapolis.....	4,631,562.00	19,935.62	4,000.00	8,750.78	.....	.....	.....	692.15	4,664,111.45	.....	.....	.....	1,255.93	.....	1,255.93	4,665,213.89	.....	.....
Knoxville.....	2,899,763.73	29,132.21	4,000.00	4,700.00	1,600.00	.....	.....	373.30	2,922,972.34	.....	.....	.....	.....	.....	.....	2,924,237.64	.....	.....
Louisville.....	4,634,985.41	32,352.29	4,000.00	7,922.00	1,600.00	.....	.....	536.94	4,671,397.61	.....	.....	.....	1,835.30	.....	1,835.30	4,673,232.91	.....	.....
Milwaukee.....	4,045,474.76	17,657.34	4,000.00	9,624.75	4,000.01	157.50	205.06	593.53	4,051,713.40	272,430.88	994.00	273,424.88	1,883.61	\$896.00	2,782.61	4,679,611.42	.....	.....
New York.....	4,389,924.13	23,125.70	4,000.00	10,999.00	.....	.....	.....	650.00	4,401,638.53	234,992.93	1,167.00	236,160.93	.....	.....	.....	4,403,336.89	.....	.....
Philadelphia.....	4,000,302.61	29,097.52	4,000.00	9,450.00	2,600.00	.....	.....	876.75	4,040,326.89	.....	.....	.....	.....	.....	.....	4,040,336.89	.....	.....
Pittsburg.....	1,211,672.96	5,203.35	4,000.00	3,505.00	.....	.....	.....	525.00	1,225,679.31	.....	.....	.....	.....	.....	.....	1,226,884.21	.....	.....
San Francisco.....	7,130,070.42	60,076.15	4,000.00	12,098.23	.....	.....	.....	991.94	7,227,236.74	35,030.91	227.00	35,257.91	1,628.47	.....	1,628.47	7,228,865.21	.....	.....
Topeka.....	5,544,804.47	23,385.98	4,000.00	14,510.00	1,050.00	99.75	20.65	1,296.00	5,559,226.85	.....	.....	.....	682.93	.....	682.93	5,562,634.59	.....	.....
Washington.....	86,591,444.30	553,950.63	72,000.00	177,377.41	14,270.01	504.63	332.75	15,046.03	87,440,926.66	1,669,153.26	7,372.80	1,676,526.05	13,619.72	896.00	14,515.72	89,131,963.44	.....	.....
Total.....	86,591,444.30	553,950.63	72,000.00	177,377.41	14,270.01	504.63	332.75	15,046.03	87,440,926.66	1,669,153.26	7,372.80	1,676,526.05	13,619.72	896.00	14,515.72	89,131,963.44	.....	.....

In addition to the above, there were disbursed during the fiscal year ending June 30, 1889, the following sums chargeable to the appropriations for the fiscal year ending June 30, 1888:

Fees of examining surgeons, Army pensions.....	\$202,322.09
Fees of examining surgeons, Navy pensions.....	1,496.75
Total.....	203,821.84

TABLE 6.—Number of pension claims filed and allowed each year since July, 1861, and the number of pensioners on the rolls at the close of each year, together with the annual amount paid on account of pensions since July 1, 1860.

Fiscal year ending June 30—	Army.		Navy.		Army and Navy.		War of 1812.			Total number of applications filed.	Total number of claims allowed.	Number of pensioners on the roll.		Disbursements.	
	Applications filed.		Applications filed.		Claims allowed.		Claims allowed.								
	Invalids.	Widows, etc.	Invalids.	Widows, etc.	Invalids.	Widows, etc.	Surviv- ors.	Widows.	Surviv- ors.			Invalids.	Widows, etc.		Total.
1861.....	1,362	1,000	60	65	413	49	.....	.....	.....	2,487	4,337	4,289	\$1,072,461.55
1862.....	26,380	22,377	290	285	4,121	3,763	.....	.....	.....	40,332	4,341	3,818	790,384.76
1863.....	20,983	32,627	385	324	17,041	22,446	.....	.....	.....	39,487	7,821	6,970	1,025,133.91
1864.....	27,290	44,764	455	466	25,212	24,959	.....	.....	.....	72,684	23,479	27,656	4,504,116.92
1865.....	35,799	43,432	463	375	22,883	27,294	.....	.....	.....	53,253	35,880	85,986	8,325,153.11
1866.....	35,934	40,285	350	333	16,589	19,893	.....	.....	.....	36,753	50,177	71,070	13,459,986.43
1867.....	15,904	20,285	250	333	16,589	19,893	.....	.....	.....	23,921	83,618	153,153	18,619,856.46
1868.....	7,232	13,089	170	207	7,432	15,904	.....	.....	.....	26,066	75,957	83,686	24,010,681.99
1869.....	11,035	14,496	290	245	7,232	15,904	.....	.....	.....	24,851	103,104	187,043	28,422,844.08
1870.....	12,991	11,400	260	240	7,934	8,399	20,741	5,074	198	43,969	93,394	114,101	27,780,811.81		
1871.....	8,837	8,935	180	142	7,934	8,399	.....	.....	.....	26,391	113,954	118,275	33,077,883.63
1872.....	8,872	6,755	240	178	6,458	7,244	.....	.....	.....	18,303	123,229	238,411	30,169,341.00
1873.....	9,302	6,427	248	120	6,551	4,073	1,481	3,186	2	16,734	119,500	118,911	28,185,289.02		
1874.....	9,302	5,603	228	120	5,937	3,132	1,737	810	563	18,704	121,638	114,613	30,683,749.56		
1875.....	11,026	5,294	310	178	5,700	3,130	425	773	168	18,704	122,989	111,832	29,683,116.63		
1876.....	17,030	5,264	371	130	4,726	240	416	168	23	22,715	124,239	107,898	38,351,499.60		
1877.....	16,582	5,269	271	97	5,360	4,366	198	351	57	22,715	128,723	103,381	28,581,567.04		
1878.....	18,812	6,661	300	131	7,414	3,861	.....	.....	.....	44,587	131,619	104,140	26,884,415.18
1879.....	36,835	9,787	590	215	7,242	3,379	.....	.....	.....	57,118	145,410	105,392	33,780,220.19
1880.....	110,673	25,602	1,361	550	10,176	3,455	2,786	8,891	2,584	41,466	138,615	104,140	57,240,540.14		
1881.....	18,435	10,537	472	251	21,394	3,969	.....	.....	.....	31,116	164,110	103,064	50,626,538.51
1882.....	29,004	10,349	472	251	32,014	3,969	.....	.....	.....	48,778	206,042	97,016	54,296,280.54
1883.....	35,023	11,878	671	277	27,414	6,306	.....	.....	.....	40,918	223,470	97,286	60,431,972.85
1884.....	28,962	11,289	671	277	27,414	6,306	.....	.....	.....	40,918	223,470	97,286	57,273,536.74
1885.....	27,959	11,557	725	277	27,580	7,743	.....	.....	.....	40,918	223,470	97,286	65,693,706.72
1886.....	35,202	13,238	802	265	31,937	8,610	.....	.....	.....	40,918	223,470	97,286	74,815,436.85
1887.....	38,454	15,733	836	338	35,283	11,217	.....	.....	.....	72,465	306,238	99,709	84,815,468.95
1888.....	47,505	18,444	1,251	427	43,843	10,816	.....	.....	.....	75,726	343,701	108,856	79,646,140.37
1889.....	52,152	23,507	1,312	579	36,870	11,921	.....	.....	.....	81,220	373,660	116,026	89,131,968.44
Total.....	716,620	409,725	14,022	7,218	440,097	263,322	34,751	44,836	25,663	1,248,146	789,121	.....	1,052,218,413.17	

In the total number of applications filed in 1889 are included 2,032 survivors and 1,311 widows of the war with Mexico. In the number of claims allowed in 1889 are included 1,772 survivors and 1,206 widows of the war with Mexico. In the number of pensioners on the roll under the heads of "Invalids" and "Widows, etc.," are included survivors and widows of the war of 1812, respectively, commencing with the year 1871, and survivors and widows of the war with Mexico, commencing with the year 1867.

TABLE 8.—*List of pension agencies, with location, geographical limits, and names of pension agents, showing the balance of funds in the hands of each agent June 30, 1889.*

Location.		Name of agent.	Amount.	Geographical limits.
City.	State.			
Augusta.....	Maine.....	John D. Anderson.....	\$10,010.15	The State of Maine: Navy pensioners in this district paid at Boston, Mass.
Boston.....	Massachusetts.....	Benj. F. Peach, jr.....	9,728.41	The States of Connecticut, Massachusetts, and Rhode Island, and all Navy pensioners residing in this and the Augusta and Concord districts.
Buffalo.....	New York.....	Jacob Schonkelberg.....	13,146.82	The counties in the State of New York not in the New York City district: All Navy pensioners in the State are paid at New York City.
Chicago.....	Illinois.....	Marian A. Mulligan.....	13,921.74	The State of Illinois and all Navy pensioners residing in this and the Columbus, Des Moines, Detroit, Indianapolis, Louisville, Milwaukee, and Topeka districts.
Columbus.....	Ohio.....	Gilbert H. Barger.....	16,763.12	The State of Ohio: Navy pensioners in this district paid at Chicago.
Concord.....	New Hampshire.....	W. H. D. Cochran.....	27,142.20	The States of New Hampshire and Vermont: Navy pensioners in this district paid at Boston.
Des Moines.....	Iowa.....	C. S. Lake.....	7,562.66	The States of Iowa and Nebraska: Navy pensioners in this district paid at Chicago.
Detroit.....	Michigan.....	Robert McKinstry.....	15,265.89	The State of Michigan: Navy pensioners in this district paid at Chicago.
Indianapolis.....	Indiana.....	Chas. A. Zollinger.....	34,288.28	The State of Indiana: Navy pensioners in this district paid at Chicago.
Knoxville.....	Tennessee.....	Daniel A. Carpenter.....	53,176.01	The States of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas: Navy pensioners in this district paid at Washington, D. C.
Louisville.....	Kentucky.....	Don Carlos Buell.....	7,585.52	The State of Kentucky: Navy pensioners in this district paid at Chicago.
Milwaukee.....	Wisconsin.....	Alfred B. Judd.....	11,103.65	The States of Minnesota and Wisconsin, and the Territory of Dakota: Navy pensioners in this district paid at Chicago.
New York.....	New York.....	Frank C. Loveland.....	21,139.72	The counties in the State of New York of Albany, Clinton, Columbia, Delaware, Dutchess, Essex, Greene, Kings, Queens, New York, Orange, Putnam, Richmond, Rensselaer, Rockland, Saratoga, Schoenectady, Sullivan, Suffolk, Ulster, Warren, Washington, and Westchester, all Navy pensioners in the State of New York, and all pensioners residing in the counties of the State of New Jersey of Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, and Warren.
Philadelphia.....	Pennsylvania.....	W. W. H. Davis.....	7,822.27	The counties in the State of Pennsylvania of Berks, Bradford, Bucks, Carbon, Chester, Columbia, Dauphin, Delaware, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Monroe, Montgomery, Montour, Northampton, Northumberland, Philadelphia, Pike, Schuylkill, Sullivan, Susquehanna, Wayne, Wyoming, and York, all Navy pensioners in the State of Pennsylvania, and all pensioners residing in the counties in the State of New Jersey of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, and Salem.
Pittsburgh.....	.....do.....	Wm. H. Barclay.....	13,332.45	The counties in the State of Pennsylvania, not in Philadelphia district. All Navy pensioners in the State are paid at Philadelphia.
San Francisco.....	California.....	Truman H. Allen.....	26,113.78	The States of California, Nevada, and Oregon, the Territories of Alaska, Idaho, Montana, Utah, Washington, and Wyoming, including the Navy pensioners.
Topeka.....	Kansas.....	George W. Glick.....	15,425.50	The States of Colorado, Kansas, and Missouri, the Territory of New Mexico, and the Indian Territory: Navy pensioners in the district paid at Chicago.
Washington.....	District of Columbia.....	Sidney L. Willson.....	20,762.57	The States of Delaware, Maryland, Virginia and West Virginia, and the District of Columbia, the inmates of the branches of the National Soldiers' Home, and pensioners residing in foreign countries and all Navy pensioners in this and the Knoxville district.
			321,291.74	

TABLE 9.—*Army invalid claims allowed each year since July 1, 1861, showing in each years, giving also the whole number filed each year and the*

Years in which the claims were filed.	The several years in which the claims were															
	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
1862	305	258	131	27	19	20	12	11	12	20	6	6	16	4	5	7
1863		3,657	9,331	1,138	517	395	235	185	143	292	156	110	129	159	121	139
1864			7,303	3,459	844	562	253	166	114	239	139	96	107	101	84	126
1865				10,045	7,819	1,863	685	417	223	382	198	132	100	92	96	113
1866					12,724	9,292	2,511	1,150	529	732	440	251	211	185	145	187
1867						3,586	3,626	1,132	525	724	349	356	149	153	88	154
1868							1,641	1,692	421	502	218	196	172	89	56	62
1869								2,238	2,208	1,284	493	300	182	142	124	97
1870									1,040	3,094	1,639	799	441	273	167	197
1871										342	1,946	1,055	438	348	214	149
1872											434	1,638	1,018	371	278	276
1873												1,322	1,762	674	342	461
1874													794	1,869	606	593
1875														937	2,243	1,169
1876															624	2,595
1877																777
1878																
1879																
1880																
1881																
1882																
1883																
1884																
1885																
1886																
1887																
1888																
1889																
Total..	305	3,915	16,765	14,669	21,923	15,718	8,963	6,991	5,215	7,612	6,018	6,261	5,519	5,397	5,193	7,102

year's allowance the number of those which were filed each year and allowed in the report percentage of the number allowed out of those filed each year.

allowed and the number allowed each year.													Number of invalid claims filed each year.	Per cent. of claims allowed of each year's filing.
1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	Total.		
4	5	24	78	38	18	9	16	15	17	9	10	1,102	1,362	80.9
147	135	281	415	392	384	263	280	269	248	230	191	19,343	26,380	75.5
109	100	228	395	328	305	240	264	220	226	194	142	16,344	20,263	80.6
122	92	172	335	284	284	189	204	168	160	110	125	24,360	27,299	89.2
202	158	257	477	368	335	255	236	219	208	177	136	31,385	35,799	87.6
139	104	190	339	281	262	202	263	187	184	131	107	13,231	15,905	83.1
59	49	109	177	99	124	98	190	80	92	61	52	6,234	7,292	85.4
102	54	143	312	267	208	180	282	141	141	115	92	9,105	11,035	82.4
132	121	220	451	379	319	243	363	233	234	164	138	10,647	12,991	81.1
125	100	228	368	293	243	218	241	211	165	125	116	6,925	8,837	78.3
214	153	251	404	328	288	231	314	226	193	144	116	6,877	8,857	77.6
253	123	257	454	330	274	209	221	197	186	161	103	7,329	8,728	83.9
243	188	328	497	384	312	213	385	254	213	169	117	7,165	9,302	77.0
483	273	455	756	559	478	349	461	323	277	239	158	9,160	11,926	76.8
1,844	608	758	1,219	905	773	578	630	570	565	413	316	12,398	17,030	72.8
2,217	1,464	1,063	1,570	1,050	1,006	709	740	698	618	444	331	12,687	16,532	76.7
908	2,568	1,806	2,385	1,400	986	888	879	816	773	559	413	14,381	18,812	76.4
.....	778	2,695	7,767	4,865	4,116	2,298	2,045	1,819	1,618	1,065	836	20,892	36,835	81.1
.....	.....	263	2,358	9,825	17,626	12,277	9,706	9,529	7,880	5,613	3,895	78,972	110,673	71.3
.....	.....	.....	155	157	1,350	1,651	1,499	1,555	1,463	1,109	909	9,848	18,455	53.3
.....	.....	.....	.....	133	1,485	2,326	2,245	2,667	2,526	2,038	1,512	14,932	29,004	51.4
.....	.....	.....	.....	.....	582	2,579	2,517	3,279	3,188	2,720	2,090	16,955	35,039	48.3
.....	.....	.....	.....	.....	.....	917	2,434	3,092	2,736	2,363	1,834	13,376	28,962	46.1
.....	.....	.....	.....	.....	.....	.....	810	3,901	3,443	2,696	2,038	12,888	27,959	46.0
.....	.....	.....	.....	.....	.....	.....	.....	883	5,842	5,423	3,849	15,997	35,202	45.4
.....	.....	.....	.....	.....	.....	.....	.....	.....	1,506	6,383	5,317	13,206	36,204	36.4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,234	9,499	11,733	47,349	24.7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,557	1,557	51,919	02.9
7,303	7,073	9,718	20,912	22,615	31,758	27,117	27,225	31,552	34,702	35,089	35,999	428,629	715,951	

TABLE 10.—*Statement of amounts paid for pensions to the survivors of the war of 1812, and to the widows of those who served in that war, since 1871; and to the survivors of the war with Mexico, and to the widows of those who served in that war, since 1887.*

Fiscal year of—	War of 1812.			War with Mexico.		
	Survivors.	Widows.	Total disbursements.	Survivors.	Widows.	Total disbursements.
1871 (from February 14, 1871) . . .	\$2,555.05	\$511.00	\$3,066.05	.....	.....	.....
1872.....	1,977,415.84	335,993.63	2,313,409.47	.....	.....	.....
1873.....	2,078,006.98	689,303.59	2,767,910.57	.....	.....	.....
1874.....	1,588,532.95	616,026.40	2,204,849.35	.....	.....	.....
1875.....	1,355,599.86	533,000.21	1,888,600.07	.....	.....	.....
1876.....	1,089,037.18	445,772.95	1,534,810.13	.....	.....	.....
1877.....	934,657.82	361,548.91	1,296,206.73	.....	.....	.....
1878 (from March 9, 1878).....	768,918.47	294,572.05	1,063,490.52	.....	.....	.....
1879.....	1,014,525.66	2,192,699.54	3,207,225.20	.....	.....	.....
1880.....	790,710.39	2,658,058.14	3,448,768.53	.....	.....	.....
1881.....	621,612.80	2,381,800.95	3,003,413.75	.....	.....	.....
1882.....	478,274.85	2,024,207.63	2,502,482.48	.....	.....	.....
1883.....	357,334.81	1,882,542.41	2,239,877.22	.....	.....	.....
1884.....	278,883.85	1,686,302.09	1,965,190.94	.....	.....	.....
1885.....	207,782.80	1,518,202.39	1,725,985.19	.....	.....	.....
1886.....	144,389.59	1,458,896.44	1,603,286.03	.....	.....	.....
1887.....	105,837.01	1,765,582.36	1,871,419.37	\$53,148.68	\$2,458.08	\$55,606.76
1888.....	73,659.48	1,598,604.96	1,670,264.44	1,861,756.07	583,056.28	2,444,812.35
1889.....	52,800.27	1,397,487.09	1,450,287.36	1,796,899.20	693,572.45	2,490,471.75
Total.....	13,921,440.66	23,839,192.74	37,760,543.40	3,711,804.05	1,279,086.81	4,990,890.86

TABLE 11.—Number of claims of each class filed, admitted, and rejected during the year and the comparative condition of the files at the beginning and close of the year.

Fiscal year ending June 30, 1889.	Army.				Navy.				Total Army and Navy.				War of 1812.				Mexican war.*		Total number of original claims.	Aggregate of all claims.		
	Invalid.		Widows, etc.		Invalid.		Widows, etc.		Army and Navy restorations.		Survivors.		Widows.		Survivors, original.	Widows, original.						
	Original.	Increase.	Total.	Original.	Increase.	Total.	Original.	Increase.	Total.	Original.	Increase.	Original.	Increase.									
Claims on the files June 30, 1888.....	268,557	178,995	447,552	122,366	499	122,867	7,511	1,182	8,693	2,977	4	2,981	.....	.....	9,261	.....	9,736	.....	3,189	1,611	425,210	605,890
Claims filed during the year.....	52,152	160,841	212,996	23,597	406	24,003	1,312	1,726	3,038	579	24	603	.....	.....	14	110	183	119	2,032	1,351	81,220	214,240
Claims rejected.....	220,709	339,539	560,248	145,665	995	146,570	8,823	2,908	11,731	3,556	28	3,584	.....	.....	9,275	10	9,919	10	5,221	2,962	506,430	850,130
Claims admitted.....	35,989	70,194	106,183	11,634	116	11,750	831	744	1,575	290	11	301	.....	.....	8	8	151	7	1,772	1,206	51,921	122,001
Claims rejected.....	11,122	27,049	38,171	5,689	41	5,730	1,180	442	1,622	341	.....	341	.....	.....	.....	.....	258	.....	348	209	19,147	56,679
Total disposed of ..	47,121	107,243	154,354	17,323	157	17,480	1,991	1,186	3,177	621	11	632	.....	.....	18	8	440	7	2,120	1,415	71,068	179,680
Claims pending June 30, 1889.....	196,804	222,536	399,340	70,195	748	70,943	3,375	1,722	5,097	1,388	17	1,405	.....	.....	99	2	356	3	788	945	243,920	479,098
Claims on rejected files June 30, 1889.....	117,906	.....	117,906	64,129	.....	64,129	4,617	.....	4,617	1,888	.....	1,888	.....	.....	9,412	.....	9,412	.....	2,661	811	210,589	210,589
Total June 30, 1889.....	284,710	232,556	517,266	134,321	748	135,099	7,992	1,722	9,714	3,276	17	3,293	.....	.....	9,207	2	9,738	3	3,449	1,756	454,500	689,597

* Under the head of "Widows," etc., in the Army and Navy classes, are included minor children and dependent relatives.

There were received during the year 256 applications for bounty-land warrants; 141 were issued and 450 applications were rejected at the close of the year; 949 applications were pending and 92,666 were on the rejected files.

There were allowed during the year 16 claims for arrears of pension in the case of those who were in receipt of a pension January 25, 1879, and granted arrears by the act of that date.

Under the act of August 4, 1886, there were allowed 834 supplemental certificates.

* Act of January 29, 1887.

† Special act.

‡ This total excludes 37,049 Army invalid, 41 Army widows, and 442 Navy invalid increase cases a total of 37,532, which were rejected during the year, and which, after such action, were returned to the admitted files.

TABLE 12.—Comparative statement of pension claims of all classes

Year.	Claims admitted and rejected.	Army.						Navy.		
		Invalid.			Widows, etc.			Invalid.		
		Original.	Increase.	Total.	Original.	Increase.	Total.	Original.	Increase.	Total.
1881	Admitted	21, 143	12, 353	33, 496	3, 717	200	3, 917	251	154	405
1881	Rejected	2, 625	6, 875	11, 500	1, 187	30	1, 167	55	65	120
	Total	23, 768	21, 228	44, 996	4, 854	230	5, 084	306	219	525
1882	Admitted	22, 684	9, 435	32, 119	3, 910	48	3, 958	262	88	350
1882	Rejected	4, 030	15, 199	19, 229	1, 512	26	1, 538	128	149	277
	Total	26, 714	24, 634	51, 348	5, 422	74	5, 496	390	237	627
1883	Admitted	31, 801	22, 554	54, 355	5, 216	67	5, 283	213	112	325
1883	Rejected	16, 901	19, 978	36, 879	4, 512	28	4, 540	530	141	671
	Total	48, 702	42, 532	91, 234	9, 728	95	9, 823	743	253	996
1884	Admitted	27, 173	22, 190	49, 363	6, 260	56	6, 316	241	270	511
1884	Rejected	17, 587	19, 887	37, 474	4, 983	15	4, 998	347	139	486
	Total	44, 760	42, 077	86, 837	11, 243	71	11, 314	588	409	997
1885	Admitted	27, 286	33, 648	60, 934	7, 632	144	7, 776	294	182	476
1885	Rejected	9, 028	19, 281	28, 309	3, 058	28	3, 086	189	89	278
	Total	36, 314	52, 929	89, 243	10, 690	172	10, 862	483	271	754
1886*	Admitted	31, 619	33, 008	64, 627	8, 501	*65, 313	73, 814	318	271	589
1886	Rejected	15, 918	41, 956	57, 874	3, 728	50	3, 778	277	279	556
	Total	47, 537	74, 964	122, 501	12, 229	65, 363	77, 592	595	550	1, 145
1887	Admitted	34, 758	31, 791	66, 549	11, 034	83	11, 117	525	223	748
1887	Rejected	7, 657	32, 024	39, 681	3, 481	70	3, 551	321	247	568
	Total	42, 415	63, 815	106, 230	14, 515	153	14, 668	846	470	1, 316
1888	Admitted	35, 089	44, 785	79, 874	10, 611	341	10, 952	754	449	1, 203
1888	Rejected	32, 213	30, 739	62, 952	11, 060	50	11, 110	740	326	1, 066
	Total	67, 302	75, 524	142, 826	21, 671	391	22, 062	1, 494	775	2, 269
1889	Admitted	35, 999	70, 194	106, 193	11, 644	116	11, 760	831	744	1, 575
1889	Rejected	11, 122	37, 049	48, 171	5, 689	41	5, 730	1, 160	442	1, 602
	Total	47, 121	107, 243	154, 364	17, 333	157	17, 490	1, 991	1, 186	3, 177

* Under act of March 19, 1886, there were 79,989 widows' pensions

settled by allowance and rejection each year since 1881, except arrears.

Navy.			Army and Navy res- torations.	Total Army and Navy.	War of 1812.				Mexican War (act of January 29, 1887).		Total number of origi- nal claims.	Aggregate of all classes.
Widows, etc.					Survivors.		Widows.		Survivors, original.	Widows, original.		
Original.	Increase.	Total.			Original.	Increase.	Original.	Increase.				
203 83	10	213 83	1,344 20	39,375 12,890	115 391	.....	1,965 1,605	.....	.....	.....	41,455 14,886
286	10	296	1,364	52,265	506	.....	3,570	.....	.....	.....	56,341
89 59	11	100 59	649	37,176 21,103	26 49	.....	693 143	.....	.....	.....	37,895 21,295
148	11	159	649	58,279	75	.....	836	.....	.....	.....	59,190
87 346	13	100 346	796	60,859 42,436	23 51	.....	822 200	.....	.....	38,162 22,540	61,704 42,687
433	13	446	796	103,295	74	.....	1,022	.....	.....	60,702	104,391
106 112	1 1	107 113	1,221	57,518 43,071	24 50	.....	388 262	.....	.....	34,192 23,341	57,930 43,383
218	2	220	1,221	100,589	74	.....	650	.....	.....	57,533	101,313
111 57	11	122 57	1,835	71,143 31,730	18 38	.....	426 167	.....	.....	35,767 12,537	71,587 31,935
168	11	179	1,835	102,873	56	.....	593	.....	.....	48,304	103,522
109 385	*1,280 2	1,389 387	2,229	*142,618 62,595	5 22	3	305 113	*13,396 2	.....	40,857 20,443	*156,357 62,732
494	1,282	1,776	2,229	205,243	27	3	418	13,398	.....	61,300	219,089
183 91	8 1	191 92	2,707	81,312 43,892	8 18	2	231 59	7,552 251	.903 14	55,194 11,892	90,008 44,234
274	9	283	2,707	125,204	26	2	290	7,803	917	67,086	134,242
205 235	11	216 235	2,028	92,245 75,363	2 11	251 56	9,048 2,062	4,292 588	60,252 46,965	105,838 78,080
440	11	451	2,028	167,608	13	307	11,110	4,880	107,227	183,918
280 341	11	291 341	1,754	119,819 55,844	8 10	8	181 268	7	1,772 348	1,206 209	51,921 19,147	123,001 56,679
621	11	632	1,754	175,663	18	8	449	7	2,120	1,415	71,068	179,680

increased (included in the above), for which no applications were required.

TABLE 14.—Operations of the special examination service of the office, showing investigations made, etc., during the fiscal year ending June 30, 1889.

Number of investigations made.	Gross savings.	Expenses.	Future sav- ings.	Net savings.
38,801				
2,363				
	\$37,837.06			
	2,674,401.05			
	15,756.61			
	\$273,447.00			
	138,927.32			
		\$38,782.00		
		264,211.50		
		7,848.60		
41,164	2,728,094.72	412,374.32	310,841.80	\$2,315,720.40
Total.....				
Total amount recovered by special examiners and refunded to pensioners.. \$5,859.63 | Number of claims suspended during the year..... 579				
Number of claims dropped during the year on special examination..... 420 | Number of cases resumed during the year..... 108				
Criminal prosecutions: Cases submitted, 206; convictions, 95; acquittals, 18; nolle prosequit, 12; awaiting action, 183.				
<i>Character of cases.</i>				
	July 1, 1888.	July 1, 1889.	Decrease.	
Cases in investigation files.....	17,950	15,806	2,144	
<i>Statement showing a comparison of work performed by special examiners, with cost of same, during the fiscal years ending June 30, 1888 and 1889.</i>				
	1888.		1889.	
Average number of examiners per month.....	241		254	
Number of reports made.....	82,747		88,801	
Average number of reports per examiner per month.....	113		123	
Number of depositions taken.....	102,992		177,743	
Average number of depositions per examiner per month.....	564		583	
Amount of expenses, exclusive of salary.....	\$409,762.29		\$412,374.32	
Average cost of each report.....	\$2.51		\$2.51	
Average cost of each deposition.....	\$2.51		\$2.51	
Number of credibility inquiries made.....	15,598		179	

TABLE 15.—Showing the number of names, with addresses, supplied to divisions and upon miscellaneous calls; also the number of addresses supplied to names especially designated by claimants or others during the fiscal year ending June 30, 1889.

Date.	Calls from ad- judicating di- visions closed on informa- tion in the files.	Calls from ad- judicating di- visions closed by corre- spondence.	Calls an- swered to claimants and attorneys.	Total calls.	Addresses of sur- geons.	Addresses supplied to names espe- cially desig- nated.	Total of all addresses furnished.	Calls on Surgeon- General.	Calls on Adjutant- General.	Calls on Navy De- partment.	Letters and circular letters.	Circular cards, includ- ing prisoners of war and naval cards.
1888.												
July.....	1,515	344	420	2,279	404	2,537	13,974	34	137	.....	3,326	255
August.....	1,677	177	475	2,329	542	2,437	15,289	49	280	.....	3,709	63
September.....	1,892	427	385	1,704	663	1,988	10,613	22	94	21	7,067	951
October.....	1,842	198	453	2,493	531	3,016	17,103	43	285	70	8,253	4,370
November.....	1,698	216	462	2,376	522	2,537	12,989	49	219	76	6,236	5,574
December.....	1,132	432	1,028	2,592	578	2,801	16,303	45	240	98	3,311	3,967
1889.												
January.....	1,996	73	1,584	3,593	937	4,162	21,827	54	359	94	5,687	7,404
February.....	1,587	74	1,378	3,039	827	3,651	19,710	79	195	76	3,536	2,984
March.....	1,556	87	1,875	3,548	794	4,081	21,200	58	62	33	3,850	4,708
April.....	1,744	48	1,506	3,298	571	3,766	20,617	89	203	90	5,898	3,151
May.....	1,955	17	1,785	3,787	977	4,035	24,400	62	224	74	5,880	4,885
June.....	1,569	49	3,017	4,635	1,972	5,596	27,600	76	93	27	4,131	5,837
Totals.....	19,163	2,142	14,363	35,673	9,338	40,667	221,616	680	2,391	742	60,875	38,769

TABLE 16.—Report of the Mail Division for the fiscal year ending June 30, 1889.

	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
RECEIVED.													
Original invalid cases*.....	4,563	4,394	3,688	3,790	2,872	3,477	4,578	4,370	4,991	5,536	6,268	7,168	55,635
Original widows' cases*.....	2,230	2,241	1,909	1,958	1,721	1,775	2,145	2,109	2,335	2,578	2,753	2,674	26,428
Original 1812 cases*.....	20	19	14	13	19	15	21	39	15	18	17	15	204
Original bounty land cases*.....	51	39	30	38	32	32	38	39	42	36	41	20	457
Original Navy cases*.....	136	144	129	130	115	104	144	128	135	161	136	212	1,734
Original old war cases and Mexican service	389	377	391	366	293	293	331	277	311	240	263	256	3,780
Applications for increase.....	10,284	7,866	13,477	10,438	7,063	10,183	13,350	11,136	16,251	16,652	20,530	22,594	183,734
Communications from the Departments.....	2,355	2,221	1,645	1,779	1,885	1,979	2,558	2,645	2,897	2,332	2,131	2,006	26,433
Pieces of additional evidence, A to G.....	11,605	11,009	10,559	11,414	8,894	10,534	13,200	12,480	12,450	12,775	14,647	14,286	146,158
Pieces of additional evidence, H to N.....	9,635	10,080	8,746	9,827	8,864	9,268	11,871	10,975	10,329	10,488	12,451	11,814	123,608
Pieces of additional evidence, O to Z.....	11,080	10,927	10,025	11,549	10,051	10,200	13,250	12,086	12,379	12,612	14,748	13,852	142,759
Fee agreements in duplicate.....	6,680	5,810	5,091	5,889	4,742	4,639	6,026	5,185	5,939	6,345	8,319	7,137	71,702
Applications for transfer.....	72	82	94	84	64	94	128	113	88	93	133	169	1,061
Applications for new certificate.....	102	121	151	138	114	144	122	113	148	103	133	169	1,558
Reports from Adjutant-General.....	3,389	2,560	10,912	11,357	10,396	11,566	12,729	9,394	10,285	10,998	11,549	11,007	133,170
Miscellaneous letters (not inquiries), and													
A. and N. service cards.....	30,712	27,053	25,772	39,982	46,729	43,556	42,995	34,330	25,420	31,264	61,488	36,192	445,553
Pension certificates returned by pension													
agents.....	2,955	1,537	3,696	6,613	6,299	3,882	4,810	4,172	3,863	8,459	5,618	2,478	54,442
Surgeons' certificates.....	14,824	14,892	11,982	16,358	12,726	14,426	13,976	11,601	12,390	11,985	13,652	16,006	164,758
Orders for medical examination returned.....	14,147	14,236	11,326	16,180	12,925	13,988	13,486	11,088	11,449	11,896	14,191	17,787	162,609
Accounts from examining surgeons.....	3,396	5,245	5,030	6,461	5,787	5,871	6,197	5,143	5,842	5,438	6,030	5,248	57,780
Reports and cases from special examiners.....	164	4,804	4,184	4,706	4,068	4,235	4,656	4,170	4,126	5,538	7,097	5,644	55,099
Reports from pension agents.....	8,186	8,583	8,565	9,411	8,571	8,395	9,339	8,241	8,142	8,367	7,264	5,204	98,408
Daily reports of special examiners.....	8,068	7,747	5,181	6,708	7,827	7,417	8,189	7,619	6,044	8,326	8,619	6,944	89,689
Credibility of witnesses returned by P. O. Dept.	12,735	2,937	2,511	3,117	3,033	3,077	3,171	3,168	3,024	2,601	3,117	2,620	35,484
Congressional communications.....	12,578	12,735	10,841	8,403	8,889	13,827	19,315	13,732	7,941	6,593	7,010	7,658	124,522
Letters of inquiry.....	60,800	59,695	59,192	67,150	55,598	58,994	72,841	54,146	56,022	54,509	77,984	90,242	788,143
Money received in mail.....	\$537.25	\$324.50	\$435.25	\$526.50	\$435.25	\$543.03	\$546.57	\$1,036.40	\$91.00	\$768.18	\$526.00	\$793.00	\$6,389.86
Postage stamps received in mail.....	873	674	434	730	624	692	899	843	631	1,025	1,909	1,708	11,042
MISCELLANEOUS.													
No. foreign letters sent (postage prepaid).....	63	50	59	66	48	53	66	53	76	45	67	65	711
Total number pieces received for the year.....	239,157	220,677	217,875	258,108	228,356	244,443	282,748	230,568	226,197	270,899	311,729	294,977	3,025,734
Total number letters sent out for the year.....	143,632	123,145	150,774	161,502	141,226	120,363	160,235	128,986	114,890	147,163	151,759	143,514	1,689,191
Calls on Adjutant-General sent for.....	13,359	11,057	9,490	16,042	10,582	9,784	12,239	9,949	9,963	10,983	14,499	14,516	143,633
Calls on Surgeon-General sent for.....	3,251	2,314	1,869	4,152	2,124	2,080	2,917	2,553	3,057	3,421	4,897	7,394	39,949

† Not included in letters sent.

* This includes duplicates.

TABLE 17.—Statement of the number of each class of army pension claims filed during the fiscal year ending June 30, 1883, on account of disability or death from causes originating since March 4, 1861; also the total number admitted of each class named, arranged according to State and Territorial military organizations.

States and Territories.	Invalid.		Widows.		Minors.		Mothers.		Fathers.		Total all classes.	
	Filed.	Admitted.	Filed.	Admitted.	Filed.	Admitted.	Filed.	Admitted.	Filed.	Admitted.	Filed.	Admitted.
Alabama	87	26	28	10	7	2	5	7	1	1	128	46
Arkansas	214	102	107	21	28	6	7	4	3	0	359	133
California	137	44	25	7	0	0	1	2	1	0	164	53
Colorado	96	59	19	2	3	1	1	0	0	1	119	43
Connecticut	522	390	267	126	20	16	33	28	11	13	853	573
Delaware	102	61	57	17	7	4	5	3	2	1	173	86
Florida	50	12	10	2	3	2	1	0	0	0	64	16
Georgia	5	6	0	2	0	0	0	0	0	0	5	8
Illinois	4,077	3,305	1,408	555	324	133	162	167	124	75	6,095	4,235
Indiana	5,134	5,225	1,561	720	460	191	236	177	118	99	7,509	6,412
Iowa	1,599	1,321	442	182	88	27	88	78	61	40	2,278	1,648
Kansas	472	295	155	47	30	11	13	12	7	14	677	379
Kentucky	2,023	1,233	626	368	196	92	85	91	50	60	2,980	1,844
Louisiana	38	9	19	8	3	3	0	1	1	0	61	21
Maine	899	776	321	189	46	15	55	59	43	33	1,274	1,072
Maryland	349	205	142	81	15	13	14	10	8	7	528	316
Massachusetts	1,545	963	665	339	61	37	79	71	34	53	2,364	1,443
Michigan	2,367	1,928	518	234	116	33	101	99	73	43	3,165	2,337
Minnesota	640	516	142	54	13	7	15	16	13	6	823	590
Mississippi	6	4	8	6	1	2	1	1	0	1	16	14
Missouri	2,190	1,090	888	345	162	73	73	71	39	38	3,352	1,617
Nebraska	83	52	19	7	5	1	1	0	0	0	108	60
Nevada	10	3	2	0	0	0	0	0	0	0	12	3
New Hampshire	397	277	158	85	9	12	20	20	15	19	599	413
New Jersey	615	372	302	117	20	13	24	30	16	8	977	540
New York	4,830	3,270	1,784	870	200	109	238	224	163	117	7,215	4,590
North Carolina	110	33	37	14	12	7	7	9	3	2	169	65
Ohio	8,573	5,840	2,110	966	392	155	358	287	180	119	11,613	7,367
Oregon	15	3	0	0	0	0	2	0	0	0	17	3
Pennsylvania	4,276	2,750	1,574	551	182	92	185	225	147	108	6,364	3,726
Rhode Island	230	108	98	35	8	1	13	4	5	2	354	150
South Carolina	1	2	0	0	0	0	0	0	0	0	1	2
Tennessee	921	522	284	144	65	43	40	47	36	20	1,346	776
Texas	13	1	4	2	2	1	0	0	0	0	19	4
Vermont	564	483	153	106	16	10	33	41	26	19	782	664
Virginia	8	7	4	3	1	4	0	0	1	2	14	16
West Virginia	907	679	291	121	41	25	40	45	27	22	1,306	892
Wisconsin	1,898	1,723	516	214	65	36	76	64	60	38	2,615	2,075
Dakota	8	8	2	0	0	0	0	0	0	0	10	8
District of Columbia	43	36	24	9	4	2	2	2	0	1	73	50
Indian Territory	12	0	4	0	2	0	2	0	0	0	20	0
Montana	0	0	1	0	0	0	0	0	0	0	1	0
New Mexico	26	2	3	2	2	0	0	0	0	0	31	4
Utah	0	1	0	0	0	0	0	0	0	0	0	1
Washington	3	4	0	0	0	0	0	0	0	0	3	4
U. S. Army	1,525	1,357	455	347	71	66	94	149	39	36	2,164	1,955
U. S. Volunteers	370	57	107	25	14	5	5	3	1	3	497	93
U. S. Colored Troops	4,026	840	1,302	108	361	102	277	140	69	27	6,035	1,217
Vet. Res. Corps	2	14	1	8	0	2	0	1	0	1	4	26
Totals	51,919	35,999	16,643	7,049	3,055	1,354	2,382	2,188	1,377	1,009	75,376	47,599

TABLE 18.—Showing the number of pensioners in each county of each State and Territory of the United States and in each foreign country on the rolls June 30, 1889.

County.	No.	County.	No.	County.	No.
<i>Alabama.</i>		<i>Arizona Territory.</i>		<i>Arkansas—Continued.</i>	
Autauga.....	9	Apache.....	18	Pulaski.....	181
Baldwin.....	3	Cochise.....	27	Randolph.....	43
Barbour.....	8	Gila.....	11	St. Francis.....	18
Bibb.....	9	Graham.....	16	Saline.....	30
Blount.....	21	Maricopa.....	45	Scott.....	50
Bullock.....	5	Mohave.....	11	Searcy.....	49
Butler.....	14	Navajo Indian Reser-		Sebastian.....	209
Calhoun.....	28	vation.....		Sevier.....	45
Chambers.....	14	Pima.....	26	Sharp.....	24
Cherokee.....	22	Pinal.....	40	Stone.....	14
Chilton.....	7	Yavapai.....	41	Union.....	5
Choctaw.....	11	Yuma.....	11	Van Buren.....	26
Clarke.....	12			Washington.....	299
Clay.....	27	Total.....	216	White.....	69
Cleburne.....	17			Woodruff.....	10
Coffee.....	4			Yell.....	48
Colbert.....	25	<i>Arkansas.</i>		Total.....	3,882
Concehuh.....	9	Arkansas.....	46	<i>California.</i>	
Coosa.....	15	Ashley.....	1	Alameda.....	188
Covington.....	8	Baxter.....	34	Alpine.....	3
Crenshaw.....	16	Benton.....	311	Amador.....	32
Cullman.....	46	Boone.....	106	Butte.....	101
Dale.....	15	Bradley.....	3	Calaveras.....	62
Dallas.....	11	Calhoun.....	3	Colusa.....	56
De Kalb.....	87	Carroll.....	234	Conijoc.....	1
Elmore.....	11	Chicot.....	47	Contra Costa.....	32
Escambia.....	5	Clark.....	6	Del Norte.....	8
Etowah.....	23	Clay.....	23	El Dorado.....	45
Fayette.....	23	Cleburne.....	66	Fresno.....	158
Franklin.....	10	Cleveland.....	11	Humboldt.....	96
Geneva.....	4	Columbia.....	17	Inyo.....	17
Greene.....	15	Conway.....	39	Kern.....	55
Hale.....	10	Craighead.....	21	Lake.....	49
Henry.....	13	Crawford.....	183	Lassen.....	14
Jackson.....	102	Crittenden.....	10	Los Angeles.....	983
Jefferson.....	77	Cross.....	14	Marin.....	13
Lamar.....	18	Dallas.....	10	Mariposa.....	32
Lauderdale.....	33	Desha.....	28	Mendocino.....	70
Lawrence.....	31	Drew.....	99	Merced.....	34
Lee.....	12	Faulkner.....	51	Modoc.....	39
Limestone.....	46	Franklin.....	127	Mono.....	7
Lowndes.....	10	Grant.....	11	Monterey.....	65
Macon.....	13	Greene.....	48	Napa.....	115
Madison.....	98	Hempstead.....	18	Nevada.....	69
Marengo.....	5	Hot Spring.....	28	Placer.....	88
Marion.....	28	Howard.....	20	Plumas.....	10
Marshall.....	38	Independence.....	84	Sacramento.....	169
Mobile.....	86	Izard.....	50	San Benito.....	25
Monroe.....	5	Jackson.....	34	San Bernardino.....	289
Montgomery.....	30	Jefferson.....	35	San Diego.....	333
Morgan.....	80	Johnson.....	86	San Francisco.....	1,312
Perry.....	16	La Fayette.....	5	San Joaquin.....	132
Pickens.....	9	Lawrence.....	41	San Luis Obispo.....	87
Pike.....	18	Lee.....	11	San Mateo.....	11
Randolph.....	22	Lincoln.....	9	Santa Barbara.....	88
Russell.....	4	Little River.....	8	Santa Clara.....	257
St. Clair.....	20	Logan.....	112	Santa Cruz.....	108
Shelby.....	23	Lonoke.....	52	Shasta.....	86
Sumpter.....	9	Madison.....	193	Sierra.....	13
Talladega.....	22	Marion.....	29	Siskiyou.....	46
Tallapoosa.....	11	Miller.....	20	Solano.....	112
Tuscaloosa.....	23	Mississippi.....	13	Sonoma.....	166
Walker.....	26	Monroe.....	10	Stanislaus.....	52
Washington.....	4	Montgomery.....	44	Sutter.....	25
Wilcox.....	11	Nevada.....	19	Tehama.....	57
Winston.....	18	Newton.....	71	Trinity.....	14
Total.....	1,505	Ouachita.....	12	Tulare.....	136
<i>Alaska.</i>		Perry.....	14	Tuolumne.....	5
		Phillips.....	48	Ventura.....	65
		Pike.....	15	Yolo.....	54
<i>The Territory</i>	6	Poinsett.....	12	Yuba.....	37
		Polk.....	31		
<i>* Total</i>	6	Pope.....	65	Total.....	6,121
		Prairie.....	27		

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Colorado.</i>		<i>Dakota Ter.—Cont'd.</i>		<i>Dakota Ter.—Cont'd.</i>	
Arapahoe.....	705	Cavelier.....	12	Ward.....	8
Archuleta.....	4	Charles Mix.....	49	Wells.....	4
Bent.....	36	Clark.....	63	Yankton.....	51
Boulder.....	94	Clay.....	66		
Chaffee.....	62	Codington.....	81	Total.....	4, 410
Clear Creek.....	38	Custer.....	61		
Concejos.....	32	Davison.....	108	<i>Delaware.</i>	
Costilla.....	7	Day.....	85	Kent.....	211
Custer.....	38	Deuel.....	57	New Castle.....	563
Delta.....	29	Dickey.....	71	Sussex.....	245
Dolores.....	14	Douglas.....	32		
Douglas.....	15	Eddy.....	19	Total.....	1, 019
Eagle.....	13	Edmunds.....	75		
Elbert.....	24	Emmons.....	22	<i>District of Columbia.</i>	
El Paso.....	112	Fall River.....	27	Washington.....	4, 197
Fremont.....	43	Faulk.....	50		
Garfield.....	49	Flannery.....	27	Total.....	4, 197
Gipin.....	13	Foster.....	16		
Grand.....	6	Garfield.....	75	<i>Florida.</i>	
Gunnison.....	27	Grand Forks.....	75	Alachua.....	64
Hinsdale.....	6	Grant.....	21	Baker.....	3
Huerfano.....	27	Griggs.....	31	Bradford.....	13
Jefferson.....	31	Hamlin.....	86	Brevard.....	11
Lake.....	69	Hard.....	64	Calhoun.....	6
La Platte.....	30	Hanson.....	41	Clay.....	21
Larimer.....	76	Harding.....	31	Columbia.....	11
Las Animas.....	111	Hughes.....	56	Dade.....	2
Logan.....	43	Hutchinson.....	31	Duval.....	89
Mesa.....	26	Hyde.....	111	Escambia.....	46
Montrose.....	37	Jerauld.....	76	Franklin.....	6
Ouray.....	18	Kidder.....	25	Gadsden.....	9
Park.....	16	Kingsbury.....	83	Hamilton.....	4
Pitkin.....	40	Lake.....	70	Hernando.....	11
Pueblo.....	133	La Moure.....	2	Hillsboro.....	99
Rio Grande.....	52	Lawrence.....	84	Holmes.....	4
Routt.....	13	Lincoln.....	13	Jackson.....	9
Saguache.....	16	Logan.....	19	Jefferson.....	7
San Juan.....	14	McCook.....	15	La Fayette.....	7
San Miguel.....	12	McHenry.....	29	Leon.....	10
Summit.....	22	McIntosh.....	44	Levy.....	11
Weld.....	74	McLean.....	14	Liberty.....	2
Washington.....	40	McPherson.....	11	Madison.....	19
		Marshall.....	49	Manatee.....	17
Total.....	2, 247	Mercer.....	110	Marion.....	62
<i>Connecticut.</i>		Meyer.....	61	Monroe.....	25
Fairfield.....	1, 357	Miner.....	36	Nassau.....	13
Hartford.....	1, 064	Minnehaha.....	34	Orange.....	95
Litchfield.....	563	Moody.....	12	Polk.....	35
Middlesex.....	275	Morton.....	25	Putnam.....	66
New Haven.....	1, 296	Nelson.....	79	St. John's.....	32
New London.....	887	Oliver.....	37	Santa Rosa.....	12
Tolland.....	259	Pembina.....	39	Sumpter.....	14
Windham.....	502	Pennington.....	37	Suwannee.....	7
		Potter.....	48	Taylor.....	12
Total.....	6, 203	Ramsey.....	29	Volusia.....	62
<i>Dakota Territory.</i>		Ransom.....	32	Wakulla.....	2
Aurora.....	84	Richland.....	64	Walton.....	30
Barnes.....	64	Roberts.....	30	Washington.....	22
Beadle.....	191	Rolette.....	11		
Benson.....	26	Sanborn.....	137	Total.....	940
Billing.....	10	Sargent.....	11		
Bon Homme.....	54	Shannon.....	19	<i>Georgia.</i>	
Boreman.....	12	Spink.....	22	Appling.....	3
Bottineau.....	11	Stanton.....	34	Baker.....	2
Brookings.....	93	Stark.....	41	Baldwin.....	6
Brown.....	147	Steele.....	12	Banks.....	4
Brulé.....	90	Stevens.....	23	Bartow.....	29
Buffalo.....	20	Stutsman.....	77	Berrien.....	2
Burdick.....	14	Sully.....	26	Bibb.....	27
Burlingame.....	65	Todd.....	77	Brooks.....	1
Butte.....	22	Towner.....	32	Bryan.....	1
Campbell.....	26	Trail.....	20	Bulloch.....	2
Cass.....	82	Turner.....	32	Burke.....	3
		Union.....	20	Butts.....	3
		Villard.....			
		Walsh.....			
		Walworth.....			

TABLE 18.—*Showing the number of pensioners, etc.—Continued.*

County.	No.	County.	No.	County.	No.
<i>Georgia—Continued.</i>		<i>Georgia—Continued.</i>		<i>Illinois—Continued.</i>	
Calhoun	4	Muscogee	17	Bureau	334
Camden	1	Newton	20	Calhoun	66
Campbell	4	Oconee .....	.....	Carroll	175
Carroll	38	Oglethorpe .....	.....	Cass	221
Catoosa	7	Paulding	15	Champaign	649
Charlton	1	Pickens	27	Christian	367
Chatham	60	Pierce	2	Clark	478
Chattahoochee	4	Pike	7	Clay	505
Chattooga	15	Polk	13	Clinton	114
Cherokee	25	Pulaski	3	Coles	360
Clarke	10	Putnam	3	Cook	3,923
Clay	4	Quitman .....	.....	Crawford	422
Clayton	8	Rabun	3	Cumberland	277
Clinch	3	Randolph	6	De Kalb	224
Cobb	34	Richmond	30	De Witt	291
Coffee	3	Rockdale	10	Douglas	221
Colquitt .....	.....	Schley	5	Du Page	98
Columbia	10	Screven	5	Edgar	457
Coweta	8	Spalding	10	Edwards	147
Crawford	4	Stewart	5	Efingham	363
Dade	10	Sumter	9	Fayette	325
Dawson	25	Talbot	5	Ford	118
Decatur	5	Taliaferro	1	Franklin	497
De Kalb	23	Tattnall	4	Fulton	652
Dodge	3	Taylor	3	Gallatin	262
Dooly	3	Telfair	1	Greene	254
Dougherty	3	Terrell	7	Grundy	128
Douglas	5	Thomas .....	.....	Hamilton	379
Early	4	Towns	15	Hancock	469
Echols	1	Troup	8	Hardin	196
Efingham	1	Twiggs	1	Henderson	120
Elbert	5	Union	20	Henry	246
Emanuel .....	.....	Upson	2	Iroquois	404
Fannin	36	Walker	22	Jackson	544
Fayette	7	Walton	2	Jasper	332
Floyd	33	Ware	10	Jefferson	391
Forsyth	7	Warren	5	Jersey	130
Franklin	4	Washington	4	Jo Daviess	222
Fulton	108	Wayne	1	Johnson	317
Gilmer	25	Webster	3	Kane	458
Glascok	1	White	9	Kankakee	222
Glynn	12	Whitfield	39	Kendall	121
Gordon	20	Wilcox .....	.....	Knox	416
Greene	9	Wilkes	3	Lake	188
Gwinnett	24	Wilkinson	5	La Salle	568
Habersham	5	Worth	7	Lawrence	328
Hall	19	Total	1,286	Lee	267
Hancock	3	<i>Idaho Territory.</i>		Livingston	270
Haralson	19	Ada	56	Logan	249
Harris	10	Alturas	28	McDonough	420
Hart	4	Bear Lake	11	McHenry	223
Heard	6	Bingham	34	McLean	664
Henry	11	Boise	12	Macon	410
Houston	4	Cassia	13	Macoupin	372
Irwin .....	.....	Custer	7	Madison	347
Jackson	12	Elmore	6	Marion	527
Jasper	2	Idaho	27	Marshall	124
Jefferson	7	Kootenai	23	Mason	223
Johnson	1	Lalale	37	Massac	299
Jones .....	.....	Lenhi	11	Menard	161
Laurens	5	Logan	12	Mercer	277
Lee .....	.....	Nez Perces	25	Monroe	82
Liberty	2	Oncida	6	Montgomery	354
Lincoln	12	Owyhee	9	Morgan	187
Lowndes	10	Shoshone	27	Moultrie	382
Lumpkin	15	Washington	26	Ogle	370
McDuffie	3	Total	370	Peoria	575
McIntosh	1	<i>Illinois.</i>		Perry	286
Macon	2	Adams	1,036	Piatt	256
Madison	3	Alexander	152	Pike	446
Marion	3	Bond	139	Pope	375
Meriwether	5	Boone	97	Pulaski	164
Miller	5	Brown	191	Putnam	51
Milton	2	.....	.....	Randolph	386
Mitchell	3	.....	.....	Richland	387
Monroe	7	.....	.....	Rock Island	304
Montgomery	6	.....	.....	St. Clair	368
Morgan	11	.....	.....	Saline	477
Murray	15	.....	.....	Sangamon	641

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Illinois—Continued.</i>		<i>Indiana—Continued.</i>		<i>Iowa.</i>	
Schuyler	260	Ohio	156	Adair	177
Scott	181	Orange	446	Adams	179
Shelby	487	Owen	588	Allamakee	164
Stark	112	Parke	314	Appanoose	390
Stephenson	281	Perry	428	Audubon	99
Tazewell	233	Pike	522	Benton	287
Union	318	Porter	267	Black Hawk	233
Vermillion	776	Posey	345	Boone	222
Wabash	169	Pulaski	249	Bremer	169
Warren	226	Putnam	423	Buchanan	251
Washington	248	Randolph	551	Buena Vista	99
Wayne	536	Ripley	521	Butler	174
White	557	Rush	294	Calhoun	197
White-side	318	St. Joseph	202	Carroll	122
Will	354	Scott	202	Cass	207
Williamson	423	Shelby	491	Cedar	140
Winneshago	318	Spencer	671	Cerro Gordo	192
Woodford	184	Starke	142	Cherokee	100
Total	36,535	Steuben	415	Chickasaw	223
<i>Indiana.</i>		Sullivan	601	Clarke	222
Adams	273	Switzerland	367	Clay	80
Allen	642	Tippecanoe	897	Clayton	259
Bartholomew	703	Tipton	390	Clinton	250
Benton	269	Union	101	Crawford	79
Blackford	189	Vanderburg	489	Dallas	233
Boone	592	Vermillion	282	Davis	216
Brown	307	Vigo	1,043	Decatur	357
Carroll	319	Wabash	407	Delaware	171
Cass	538	Warren	209	Des Moines	234
Clark	536	Warrick	353	Dickinson	53
Clay	637	Washington	487	Dubuque	265
Clinton	560	Wayne	591	Emmet	32
Crawford	584	Wells	274	Fayette	301
Daviess	409	White	345	Floyd	140
Dearborn	528	Whitley	311	Franklin	116
Decatur	543	Total	42,553	Fremont	217
De Kalb	422	<i>Indian Territory.</i>		Greene	171
Delaware	446	Alfred	1	Grundy	51
Dubois	367	Cherokee Nation	186	Guthrie	218
Elkhart	510	Al-Lu-wa	1	Hamilton	141
Fayette	233	Cherokee Outlet	2	Hancock	49
Floyd	402	Cheyenne and Arapa- hoe Nation	8	Hardin	265
Fountain	437	Blue	1	Harrison	281
Franklin	376	Chickasaw Nation	44	Henry	320
Fulton	358	Greer	1	Howard	158
Gibson	421	Choctaw Nation	67	Humboldt	81
Grant	573	Cooweescoowe	1	Ida	57
Greene	773	Creek Nation	63	Iowa	188
Hamilton	523	Frisco	1	Jackson	292
Hancock	359	Kansas Nation	5	Jasper	400
Harrison	449	Guthrie	4	Jefferson	307
Hendricks	502	Kickapoo Nation	6	Johnson	183
Henry	427	Kiowa Agency	1	Jones	273
Howard	437	Kiowa and Comanche Nation	4	Keokuk	417
Huntington	425	Oklahoma	207	Kossuth	111
Jackson	759	Osage Nation	5	Lee	578
Jasper	241	McAlester	1	Linn	569
Jay	477	Otoe and Missouri Nation	1	Louis	292
Jefferson	620	Neutral Strip	1	Lucas	245
Jennings	484	Pawnee Nation	10	Lyon	52
Johnson	411	Pickens	3	Madison	227
Knox	482	Peoria Nation	5	Mahaska	366
Kosciusko	428	Ponca Nation	2	Marion	426
Lagrange	267	Pottawatomie Nation	8	Marshall	48
Lake	237	Purcell	1	Mills	125
La Porte	303	Public Land Strip	37	Mitchell	129
Lawrence	656	Sac and Fox Nation	1	Mouana	121
Madison	537	San Bois	1	Monroe	180
Marion	2,375	Seminole Nation	26	Montgomery	192
Marshall	475	Tobucky	1	Muscataine	291
Martin	436	Wyandotte Nation	3	O'Brien	130
Miami	404	Total	710	Osccola	80
Monroe	544			Page	283
Montgomery	638			Falo Alto	77
Morgan	612			Plymouth	105
Newton	161			Pocahontas	69
Noble	404			Polk	737
				Pottawattamie	332
				Poweshiek	211
				Ringgold	255

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Iowa—Continued.</i>		<i>Kansas—Continued.</i>		<i>Kentucky—Continued.</i>	
Sac	111	Linn	262	Carroll	68
Scott	235	Logan	75	Carter	198
Shelby	104	Lyon	330	Casey	182
Sioux	90	McPherson	200	Christian	99
Story	216	Marion	195	Clark	68
Tama	163	Marshall	232	Clay	190
Taylor	255	Meade	80	Clinton	159
Union	238	Miami	176	Crittenden	91
Van Buren	370	Mitchell	244	Cumberland	193
Wapello	543	Montgomery	554	Daviess	193
Warren	161	Morris	171	Edmonson	98
Washington	295	Morton	62	Elliott	26
Wayne	348	Nemaha	250	Estill	156
Webster	173	Neosho	242	Fayette	132
Winnebago	58	Ness	99	Fleming	153
Winneshiek	193	Norton	131	Floyd	41
Woodbury	282	Osage	269	Franklin	131
Worth	50	Osborne	259	Fulton	20
Wright	107	Ottawa	188	G. Iatin	38
Total	20,885	Pawnee	177	Garrard	68
<i>Kansas.</i>		Phillips	221	Grant	91
Allen	217	Pottawatomie	226	Graves	36
Anderson	322	Pratt	126	Grayson	253
Atchison	267	Rawlins	75	Greene	215
Barber	112	Reno	384	Greenup	120
Barton	195	Republic	192	Hancock	55
Bourbon	391	Rice	273	Hardin	197
Brown	188	Riley	142	Harlan	34
Butler	381	Rooks	148	Harrison	236
Chase	124	Rush	90	Hart	236
Chautauqua	255	Russell	136	Henderson	83
Cherokee	330	St. John	2	Henry	98
Cheyenne	55	Saline	196	Hickman	18
Clark	82	Scott	20	Hopkins	93
Clay	183	Sedgwick	470	Jackson	134
Cloud	281	Seward	58	Jefferson	1,219
Coffey	283	Shawnee	650	Jessamine	58
Comanche	48	Sheridan	49	Johnson	95
Cowley	524	Sberman	79	Kenton	265
Crawford	385	Smith	196	Knott	4
Davis	5	Stafford	134	Knox	97
Decatur	134	Stanton	27	La Rue	121
Dickinson	261	Stevens	34	Laurel	159
Doniphan	194	Sumner	397	Lawrence	176
Douglas	347	Thomas	52	Lee	55
Edwards	91	Trego	70	Leslie	25
Elk	250	Wabauusee	104	Letcher	11
Ellis	95	Wallace	38	Lewis	251
Ellsworth	151	Washington	246	Lincoln	153
Finney	90	Wichita	55	Livingstone	63
Ford	142	Wilson	285	Logan	128
Franklin	283	Woodson	143	Lyon	41
Garfield	36	Worth	1	McCracken	73
Geary	127	Wyandotte	387	McLean	67
Gove	65	Total	20,588	Madison	134
Graham	75	<i>Kentucky.</i>		Magoffin	67
Grant	53	Adair	303	Marion	164
Gray	53	Allen	168	Marshall	42
Greeley	46	Anderson	78	Martin	74
Greenwood	260	Ballard	27	Mason	159
Hamilton	66	Barren	147	Mcade	48
Harper	159	Bath	72	Menifee	20
Harvey	248	Bell	34	Mercer	127
Haskell	43	Boone	60	Metcalf	188
Hodgeman	70	Bourbon	53	Monroe	259
Jackson	148	Boyd	164	Montgomery	99
Jefferson	163	Boyle	103	Morgan	29
Jewell	239	Bracken	77	Muhlenberg	214
Johnson	199	Breathitt	49	Nelson	90
Kearney	31	Breckinridge	163	Nicholas	72
Kingman	154	Bullitt	43	Ohio	255
Kiowa	63	Butler	180	Oldham	29
Labette	479	Caldwell	59	Owen	65
Lane	43	Calloway	36	Onsley	132
Leavenworth	1,071	Campbell	258	Pondleton	161
Lincoln	117	Carlisle	7	Perry	33
				Pike	81
				Powell	28
				Pulaski	308

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Kentucky—Continued.</i>		<i>Louisiana—Continued.</i>		<i>Michigan—Continued.</i>	
Robertson	18	West Baton Rouge	5	Antrim	120
Rockcastle	103	West Carroll	3	Arenac	32
Rowan	47	West Feliciana	7	Baraga	7
Russell	154	Winn	6	Barry	450
Scott	42	Total	1,412	Bay	209
Shelby	73	<i>Maine.</i>		Benzie	51
Simpson	41	Androscoggin	830	Berrien	932
Spencer	24	Aroostook	686	Branch	704
Taylor	198	Cumberland	1,197	Calhoun	996
Todd	67	Franklin	492	Cass	349
Trigg	30	Hancock	749	Charlevoix	120
Trimble	28	Kennebec	2,582	Cheboygan	109
Union	44	Knox	788	Chippewa	24
Warren	277	Lincoln	584	Clare	106
Washington	167	Oxford	881	Clinton	507
Wayne	108	Penobscot	2,068	Crawford	46
Webster	46	Piscataquis	391	Delta	25
Whitley	111	Sagadahoc	359	Eaton	719
Wolfe	30	Somerset	739	Emmett	171
Woodford	45	Waldo	1,127	Genesee	773
Total	13,764	Washington	1,041	Gladwin	13
<i>Louisiana.</i>		York	769	Grand Haven	153
Acadia	14	Total	15,334	Gratiot	477
Ascension	32	<i>Maryland.</i>		Hillsdale	614
Assumption	9	Alleghany	205	Houghton	23
Avoyelles	8	Anne Arundel	108	Huron	114
Bienville	11	Baltimore	2,582	Ingham	737
Bossier	7	Calvert	14	Ionia	518
Caddo	20	Caroline	77	Iosco	55
Calcasieu	38	Cecil	236	Iron	11
Caldwell	10	Charles	30	Isabella	229
Cameron	3	Dorchester	80	Jackson	809
Catahoula	20	Frederick	227	Kalamazoo	445
Claiborne	21	Garrett	69	Kalkaska	104
Concordia	22	Harford	138	Kent	1,053
De Soto	13	Howard	46	Keweenaw	7
East Baton Rouge	68	Kent	71	Lapeer	381
East Carroll	19	Montgomery	61	Lake	88
East Feliciana	36	Prince George's	80	Leelanaw	67
Franklin	2	Queen Anne's	69	Lenawee	777
Grant	10	St. Mary's	37	Livingston	338
Iberia	8	Somerset	55	Mackinac	29
Iberville	25	Talbot	87	Macomb	343
Jackson	3	Washington	299	Manistee	98
Jefferson	22	Wicomico	76	Manitou	4
La Fayette	2	Worcester	71	Marquette	53
La Fourche	18	Total	4,892	Mason	133
Lincoln	5	<i>Massachusetts.</i>		Mecosta	199
Livingston	20	Barnstable	303	Menominee	40
Madison	9	Berkshire	675	Midland	125
Morehouse	5	Bristol	1,260	Missaukee	23
Natchitoches	19	Dukes	39	Monroe	481
Orleans	661	Essex	3,811	Montcalm	513
Onachita	11	Franklin	553	Montmorency	14
Plaquemines	6	Hampden	857	Muskegon	308
Pointe Coupée	3	Hampshire	491	Newaygo	211
Rapides	26	Middlesex	3,649	Oakland	551
Red River	6	Nantucket	65	Ocean	218
Richland	3	Norfolk	1,053	Ogemaw	45
Sabine	11	Plymouth	1,362	Ontonagon	8
St. Bernard	1	Suffolk	3,495	Oscoda	189
St. Charles	1	Worcester	3,159	Oscoda	35
St. Helena	12	Total	20,272	Otsego	39
St. James	9	<i>Michigan.</i>		Ottawa	272
St. John Baptist	6	Alcona	14	Presque Isle	10
St. Landry	15	Alger	11	Roscommon	21
St. Martin	2	Allegan	541	Saginaw	601
St. Mary's	18	Alpena	54	St. Clair	417
St. Tammany	26			St. Joseph	475
St. Vincent	36			Sanilac	167
Terre Bonne	14			Schoolcraft	18
Union	3			Shiawassee	519
Van Buren	4			Tuscola	411
Van Hise	9			Van Buren	772
Van Meter	2			Washtenaw	597
Van Orman	5			Wayne	2,060
Webster	2			Wexford	175
				Total	24,245

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Minnesota.</i>		<i>Minnesota—Continued.</i>		<i>Mississippi—Cont'd.</i>	
Aitkin.....	25	Wright.....	172	Winston.....	16
Anoka.....	143	Yellow Medicine.....	51	Yalobusha.....	14
Becker.....	70	Total.....	8,528	Total.....	1,142
Beltrami.....	15	<i>Mississippi.</i>		<i>Missouri.</i>	
Benton.....	40	Adams.....	131	Adair.....	338
Big Stone.....	61	Alcorn.....	16	Andrew.....	145
Blue Earth.....	278	Amite.....	17	Atchison.....	125
Brown.....	102	Attala.....	15	Audrain.....	103
Carlton.....	30	Benton.....	12	Barry.....	180
Carver.....	140	Bolivar.....	15	Barton.....	216
Cass.....	20	Calhoun.....	17	Bates.....	282
Chippewa.....	42	Carroll.....	20	Benton.....	130
Chisago.....	79	Chickasaw.....	10	Bollinger.....	109
Clay.....	51	Choctaw.....	7	Bacon.....	140
Cook.....	10	Claiborne.....	18	Buchanan.....	386
Cottonwood.....	57	Clarke.....	15	Butler.....	89
Crow Wing.....	59	Clay.....	16	Caldwell.....	205
Dakota.....	89	Coahoma.....	8	Callaway.....	85
Dodge.....	128	Copiah.....	33	Camden.....	101
Douglas.....	99	Covington.....	7	Cape Girardeau.....	259
Faribault.....	209	De Soto.....	21	Carroll.....	235
Fillmore.....	293	Franklin.....	7	Carter.....	21
Freeborn.....	169	Greene.....	3	Cass.....	237
Goodhue.....	156	Grenada.....	13	Cedar.....	153
Grant.....	87	Hancock.....	18	Chariton.....	192
Hennepin.....	1,068	Harrison.....	25	Christian.....	142
Houston.....	81	Hinds.....	43	Clark.....	181
Hubbard.....	33	Holmes.....	17	Clay.....	122
Isanti.....	19	Issaquena.....	10	Clinton.....	151
Itasca.....	10	Itawamba.....	8	Cole.....	122
Jackson.....	46	Jackson.....	18	Cooper.....	117
Kanabec.....	16	Jasper.....	1	Crawford.....	96
Kandiyohi.....	59	Jefferson.....	10	Dade.....	145
Kittson.....	6	Jones.....	12	Dallas.....	170
Lac-qui-parle.....	32	Kemper.....	9	Davies.....	212
Lake.....	18	La Fayette.....	31	De Kalb.....	125
Le Sueur.....	245	Lauderdale.....	23	Dent.....	113
Lincoln.....	47	Lawrence.....	4	Douglas.....	101
Lyon.....	146	Leake.....	6	Dunklin.....	58
McLeod.....	125	Lee.....	11	Franklin.....	201
Marshall.....	31	Le Flore.....	6	Gasconade.....	89
Martin.....	88	Lincoln.....	6	Gentry.....	238
Meeker.....	122	Lowndes.....	12	Greene.....	373
Mille Lacs.....	52	Madison.....	17	Grundy.....	347
Morrison.....	86	Marion.....	7	Harrison.....	277
Mower.....	197	Marshall.....	18	Henry.....	192
Murray.....	38	Monroe.....	17	Hickory.....	107
Nicollet.....	64	Montgomery.....	14	Holt.....	208
Nobles.....	35	Neshoba.....	9	Howard.....	83
Norman.....	22	Newton.....	9	Howell.....	190
Olmsted.....	192	Nexbee.....	9	Iron.....	85
Otter Tail.....	173	Oktibbeha.....	14	Jackson.....	593
Pine.....	34	Panola.....	14	Jasper.....	494
Pipestone.....	75	Perry.....	10	Jefferson.....	146
Polk.....	69	Pike.....	21	Johnson.....	213
Popo.....	57	Pontotoc.....	12	Knox.....	124
Ramsey.....	537	Prentiss.....	8	Laclede.....	198
Redwood.....	67	Quitman.....	3	La Fayette.....	128
Renville.....	65	Rankin.....	16	Lawrence.....	248
Rice.....	212	Scott.....	10	Lewis.....	169
Rock.....	49	Sharkey.....	6	Lincoln.....	81
St. Louis.....	73	Simpson.....	4	Linn.....	372
Scott.....	124	Smith.....	.....	Livingston.....	236
Sherburne.....	43	Sun Flower.....	4	McDonald.....	176
Sibley.....	117	Tallahatchee.....	17	Macon.....	458
Stearns.....	159	Tate.....	17	Madison.....	64
Steele.....	111	Tippah.....	14	Marion.....	39
Stevens.....	41	Tishomingo.....	14	Maries.....	287
Swift.....	52	Tunica.....	6	Mercer.....	228
Todd.....	89	Union.....	10	Miller.....	144
Traverse.....	22	Warren.....	80	Mississippi.....	24
Wabasha.....	180	Washington.....	23	Moniteau.....	102
Wadena.....	78	Wayne.....	12	Monroe.....	89
Waseca.....	7	Webster.....	10	Montgomery.....	119
Washington.....	131	Wilkinson.....	19		
Watsonwan.....	44				
Wilkin.....	22				
Winona.....	224				

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Missouri—Continued.</i>		<i>Nebraska—Continued.</i>		<i>Nebraska—Continued.</i>	
Morgan	96	Brown	86	Valley	110
New Madrid	17	Buffalo	288	Washington	92
Newton	212	Burt	83	Wayne	35
Nodaway	351	Butler	128	Webster	137
Oregon	62	Cass	169	Wheeler	31
Osage	78	Cedar	29	York	208
Ozark	87	Chase	64		
Pemiscot	17	Cherry	54	Total	8,538
Perry	61	Cheyenne	93		
Pettis	183	Clay	168	<i>Nevada.</i>	
Phelps	145	Colfax	58	Churchill	1
Pike	171	Cuming	41	Douglas	1
Platte	86	Custer	236	Elko	17
Polk	225	Davis	1	Esmeralda	8
Pulaski	88	Dakota	56	Eureka	4
Putnam	328	Dawes	99	Humboldt	13
Ralls	62	Dawson	100	Lander	7
Randolph	175	Deuel	19	Lincoln	4
Ray	168	Dixon	72	Lyon	9
Reynolds	15	Dodge	104	Nye	2
Ripley	60	Douglas	440	Ormsby	20
St. Charles	73	Dundy	76	Storey	21
St. Clair	155	Farmer	1	Washoe	31
St. Francois	106	Fillmore	177	White Pine	7
St. Genevieve	48	Franklin	103		
St. Louis	2,028	Frontier	63	Total	145
Saline	183	Furnas	137		
Schuyler	206	Gage	247	<i>New Hampshire.</i>	
Scotland	152	Garfield	16	Belknap	479
Scott	75	Gosper	17	Carroll	394
Shannon	17	Grant	14	Cheshire	469
Shelby	178	Greeley	36	Coos	363
Stoddard	133	Hall	160	Grafton	805
Stone	66	Hamilton	101	Hillsborough	1,355
Sullivan	363	Harlan	106	Merrimack	923
Taney	100	Hayes	31	Rockingham	897
Texas	189	Hitchcock	82	Stafford	558
Vernon	255	Holt	209	Sullivan	437
Warren	46	Howard	61		
Washington	133	Jefferson	142	Total	6,680
Wayne	117	Johnson	129		
Webster	198	Kearney	77	<i>New Jersey.</i>	
Worth	136	Keith	36	Atlantic	220
Wright	191	Keya Paha	49	Bergen	130
Total	20,897	Kimball	5	Burlington	686
		Knox	91	Camden	752
<i>Montana Territory.</i>		Lancaster	365	Cape May	128
Beaver Head	12	Lincoln	84	Cumberland	521
Cascade	12	Logan	19	Essex	1,292
Choteau	12	Loup	30	Gloucester	238
Custer	44	McPherson	1	Hudson	830
Dawson	13	Madison	102	Hunterdon	334
Deer Lodge	50	Merriek	143	Mercer	794
Fergus	12	Nance	39	Middlesex	349
Gallatin	38	Nemaha	119	Monmouth	646
Indian Reservation	33	Nuckolls	106	Morris	319
Jefferson	32	Omaha Reserve	11	Ocean	255
Lewis and Clarke	76	Otoe	131	Passaic	480
Madison	23	Pawnee	107	Salem	250
Meagher	28	Perkins	87	Somerset	167
Missoula	57	Phelps	51	Sussex	199
Park	42	Pierce	38	Union	417
Silver Bow	52	Platte	87	Warren	296
Weber	1	Polk	70		
Yellowstone	23	Rock	26	Total	9,303
Total	527	Red Willow	143		
		Richardson	208	<i>New Mexico Territory.</i>	
<i>Nebraska.</i>		Saline	235	Bernalillo	43
Adams	192	Sarpy	32	Colfax	27
Antelope	117	Saunders	157	Doña Ana	22
Banner	15	Scott's Bluff	14	Grant	30
Blaine	31	Seward	139	Lincoln	32
Box Butte	56	Sheridan	81	Mora	18
Boone	77	Shorman	77	Rio Arriba	8
		Sioux	11	San Juan	6
		Stanton	21		
		Thurston	5		
		Thayer	157		
		Thomas	17		

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>New Mexico—Cont'd.</i>		<i>North Carolina—Cont'd.</i>		<i>North Carolina—Cont'd.</i>	
San Miguel	40	Anson	12	Swain	6
Santa Fe	50	Asho	30	Transylvania	7
Sierra	19	Beaufort	43	Tyrrell	5
Socorro	38	Bertie	26	Union	3
Taos	8	Bladen	11	Vance	9
Valencia	4	Brunswick	15	Wake	40
Total	345	Buncombe	65	Warren	9
<i>New York.</i>		Burke	18	Washington	23
Albany	851	Cabarrus	21	Watauga	21
Allegany	874	Caldwell	11	Wayne	17
Broome	938	Camden	13	Wilkes	39
Cattaraugus	989	Carteret	31	Wilson	22
Cayuga	882	Caswell	18	Yadkin	11
Chautauqua	982	Catawba	9	Yancey	40
Chemung	718	Chatham	8	Total	1,674
Chenango	779	Cherokee	65	<i>Ohio.</i>	
Clinton	600	Chowan	5	Adams	785
Columbia	387	Clay	14	Allen	500
Cortland	392	Cleveland	6	Ashland	426
Delaware	626	Columbus	10	Ashtabula	721
Dutchess	624	Craven	96	Athens	757
Erie	1,496	Cumberland	22	Auglaize	334
Essex	723	Currituck	13	Belmont	703
Franklin	576	Dare	22	Brown	661
Fulton	553	Davidson	7	Butler	446
Genesee	367	Davis	4	Carroll	185
Greene	266	Duplin	11	Champaign	442
Hamilton	100	Durham	10	Clarke	600
Herkimer	680	Edgecombe	15	Clermont	714
Jefferson	1,282	Forsyth	21	Clinton	549
Kings	3,486	Franklin	3	Columbiana	747
Lewis	379	Gaston	7	Coshocton	371
Livingston	546	Gates	10	Crawford	300
Madison	668	Graham	6	Cuyahoga	1,368
Monroe	1,298	Granville	7	Darke	351
Montgomery	436	Greene	3	Defiance	383
New York	4,827	Guilford	17	Delaware	428
Niagara	526	Halifax	9	Erie	474
Oneida	1,468	Harnett	5	Fairfield	457
Onondaga	1,399	Haywood	9	Fayette	348
Ontario	538	Henderson	33	Franklin	1,788
Orange	862	Hertford	11	Fulton	403
Orleans	354	Hyde	13	Gallia	596
Oswego	1,380	Iredell	17	Geauga	224
Otsego	691	Jackson	8	Greene	489
Putnam	64	Johnson	22	Guernsey	516
Queens	582	Jones	5	Hamilton	2,686
Rensselaer	813	Lenoir	12	Hancock	468
Richmond	228	Lincoln	9	Hardin	658
Rockland	138	McDowell	16	Harrison	246
Saint Lawrence	1,120	Macon	17	Henry	410
Saratoga	603	Madison	72	Highland	573
Schenectady	206	Martin	14	Hocking	374
Schoharie	296	Mecklenburgh	23	Holmes	248
Schuyler	319	Mitchell	97	Huron	484
Seneca	373	Montgomery	5	Jackson	440
Stenben	1,971	Moore	8	Jefferson	437
Suffolk	321	Nash	13	Knox	599
Sullivan	432	New Hanover	30	Lake	287
Tioga	660	Northampton	10	Lawrence	852
Tompkins	521	Onslow	10	Licking	478
Ulster	649	Orange	19	Logan	426
Warren	711	Panlico	12	Lorain	413
Washington	634	Pasquotank	29	Lucas	843
Wayne	657	Pender	7	Madison	330
Westchester	620	Perquimans	29	Mahoning	434
Wyoming	465	Person	2	Marion	287
Yates	299	Pitt	14	Medina	228
Total	47,235	Polk	9	Meigs	737
<i>North Carolina.</i>		Randolph	9	Mercer	278
Alamance	20	Richmond	8	Miami	558
Alexander	4	Robeson	15	Monroe	491
Alleghany		Rockingham	21	Montgomery	3,137
		Rowan	6	Morgan	407
		Rutherford	6	Morrow	386
		Sampson	4	Muskingum	907
		Stanly	1		
		Stokes	10		
		Surry	24		

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Ohio—Continued.</i>		<i>Pennsylvania—Cont'd.</i>		<i>South Carolina—Cont'd.</i>	
Noble.....	361	Choctaw.....	716	Darlington.....	19
Ottawa.....	371	Clarion.....	639	Edgefield.....	25
Paulding.....	454	Clearfield.....	552	Fairfield.....	14
Perry.....	503	Clinton.....	128	Georgetown.....	3
Pickaway.....	319	Columbia.....	286	Greenville.....	18
Pike.....	320	Crawford.....	824	Hampton.....	4
Portage.....	330	Cumberland.....	339	Horry.....	7
Preble.....	275	Dauphin.....	893	Kershaw.....	20
Putnam.....	391	Delaware.....	430	Lancaster.....	19
Richland.....	751	Elk.....	97	Laurens.....	14
Ross.....	711	Erie.....	1, 116	Lexington.....	4
Sandusky.....	359	Fayette.....	684	Marion.....	7
Scioto.....	620	Forest.....	621	Marlborough.....	2
Seneca.....	816	Franklin.....	456	Newberry.....	8
Shelby.....	268	Fulton.....	152	Oconee.....	7
Stark.....	739	Greene.....	391	Orangeburgh.....	10
Summit.....	485	Huntingdon.....	631	Pickens.....	8
Trumbull.....	458	Indiana.....	616	Richland.....	37
Tuscarawas.....	426	Jefferson.....	580	Spartanburgh.....	23
Union.....	516	Juniata.....	277	Sumter.....	12
Van Wert.....	494	Lackawanna.....	644	Union.....	5
Vinton.....	276	Lancaster.....	1, 327	Williamsburgh.....	7
Warren.....	369	Lawrence.....	445	York.....	1
Washington.....	891	Lebanon.....	472		
Wayne.....	576	Lehigh.....	348	Total.....	534
Williams.....	509	Luzerne.....	1, 003		
Wood.....	820	Lycoming.....	668	<i>Tennessee.</i>	
Wyandot.....	379	McKean.....	376	Anderson.....	249
Total.....	50, 081	Mercer.....	633	Bedford.....	65
<i>Oregon.</i>		Mifflin.....	304	Benton.....	21
Baker.....	46	Monroe.....	190	Bledsoe.....	35
Benton.....	65	Montgomery.....	719	Blount.....	219
Clackamas.....	81	Northampton.....	585	Bradley.....	152
Clatsop.....	26	Northumberland.....	482	Campbell.....	118
Columbia.....	37	Perry.....	433	Cannon.....	35
Coos.....	62	Philadelphia.....	9, 078	Carroll.....	108
Crook.....	14	Pike.....	53	Carte.....	278
Curry.....	17	Potter.....	492	Cheatham.....	18
Douglas.....	59	Schuylkill.....	790	Chester.....	11
Gilliam.....	29	Snyder.....	252	Claiborne.....	141
Grant.....	29	Somersot.....	733	Clay.....	49
Jackson.....	99	Sullivan.....	88	Cocke.....	119
Josephine.....	48	Susquehanna.....	710	Coffee.....	80
Klamath.....	10	Tioga.....	1, 171	Crockett.....	18
Lake.....	16	Union.....	184	Cumberland.....	36
Lane.....	110	Venango.....	436	Davidson.....	346
Linn.....	73	Warren.....	393	Decatur.....	31
Marion.....	112	Washington.....	519	De Kalb.....	121
Morrow.....	26	Wayne.....	289	Dickson.....	32
Multnomah.....	238	Westmoreland.....	846	Dyer.....	16
Polk.....	31	Wyoming.....	322	Fayette.....	21
Tillamook.....	21	York.....	689	Fentress.....	45
Umatilla.....	65	Total.....	46, 361	Franklin.....	44
Union.....	83	<i>Rhode Island.</i>		Gibson.....	40
Wasco.....	56	Bristol.....	75	Giles.....	106
Washington.....	84	Kent.....	165	Grainger.....	170
Yam Hill.....	60	Newport.....	149	Greene.....	436
Total.....	1, 597	Providence.....	1, 483	Grundy.....	13
<i>Pennsylvania.</i>		Washington.....	253	Hamblen.....	111
Adams.....	279	Total.....	2, 125	Hamilton.....	197
Allegheny.....	2, 388	<i>South Carolina.</i>		Hancock.....	102
Armstrong.....	711	Abbeville.....	22	Hardeman.....	17
Beaver.....	598	Aiken.....	9	Harden.....	56
Bedford.....	688	Anderson.....	15	Hawkins.....	233
Berks.....	851	Barnwell.....	3	Haywood.....	23
Blair.....	833	Beaufort.....	63	Henderson.....	65
Bradford.....	1, 528	Berkeley.....	15	Henry.....	40
Bucks.....	518	Charleston.....	73	Hickman.....	52
Butler.....	828	Chester.....	18	Houston.....	11
Cambria.....	468	Chesterfield.....	5	Humphreys.....	21
Cameron.....	114	Clarendon.....	7	Jackson.....	54
Carbon.....	280	Colleton.....	20	James.....	76
Centre.....	760			Jefferson.....	233
				Johnson.....	163
				Knox.....	601
				Lake.....	5
				Lauderdale.....	20
				Lawrence.....	41

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Tennessee—Continued.</i>		<i>Texas—Continued.</i>		<i>Texas—Continued.</i>	
Lewis.....	8	Clay.....	20	Lavaca.....	17
Lincoln.....	43	Coleman.....	6	Lee.....	1
London.....	129	Collins.....	94	Leon.....	1
McMinn.....	163	Colorado.....	23	Liberty.....	1
McNairy.....	80	Comal.....	16	Limestone.....	26
Macon.....	101	Comanche.....	22	Live Oak.....	1
Madison.....	35	Concho.....	2	Llano.....	1
Marion.....	47	Cook.....	64	Lubbock.....	1
Marshall.....	47	Coryell.....	29	McCulloch.....	1
Maury.....	75	Cottle.....	1	McLennan.....	1
Meigs.....	85	Crockett.....	2	McMullen.....	1
Monroe.....	93	Crosby.....	3	Madison.....	1
Montgomery.....	48	Dallas.....	159	Marion.....	1
Moore.....	3	Dalla.....	18	Martin.....	1
Morgan.....	83	Denton.....	61	Mason.....	1
Obion.....	42	De Witt.....	26	Matagorda.....	1
Overton.....	51	Dickens.....	1	Maverick.....	1
Perry.....	23	Dimmit.....	4	Medina.....	1
Pickett.....	51	Donley.....	3	Menard.....	1
Polk.....	67	Duval.....	1	Midland.....	1
Putnam.....	68	Eastland.....	24	Milan.....	1
Rhea.....	112	Edwards.....	8	Mitchell.....	1
Roane.....	262	Ellis.....	48	Montague.....	1
Robertson.....	23	El Paso.....	23	Montgomery.....	1
Rutherford.....	57	Encinal.....	1	Morris.....	1
Scott.....	60	Erath.....	27	Motley.....	1
Sequatchie.....	12	Falls.....	26	Nacogdoches.....	1
Sevier.....	221	Fannin.....	111	Navarro.....	1
Shelby.....	183	Fayette.....	31	Newton.....	1
Smith.....	112	Fisher.....	3	Nolan.....	1
Stewart.....	19	Floyd.....	2	Nueces.....	1
Sullivan.....	114	Fort Bend.....	8	Ochiltree.....	1
Sumner.....	69	Franklin.....	13	Oldham.....	1
Tipton.....	94	Freestone.....	14	Orange.....	1
Trousdale.....	17	Frio.....	16	Palo Pinto.....	1
Unicoi.....	82	Galveston.....	56	Panola.....	1
Union.....	140	Gillespie.....	21	Parker.....	1
Van Buren.....	5	Goliad.....	12	Pecos.....	1
Warren.....	43	Gonzales.....	38	Polk.....	1
Washington.....	305	Gray.....	1	Potter.....	1
Wayne.....	48	Grayson.....	185	Prossidio.....	1
Weakley.....	66	Gregg.....	12	Rains.....	1
White.....	26	Grimes.....	14	Red River.....	1
Williamson.....	47	Guadalupe.....	18	Reeves.....	1
Wilson.....	79	Hale.....	1	Refugio.....	1
Total.....	8,782	Hall.....	4	Robertson.....	1
<i>Texas.</i>		Hamilton.....	16	Rockwell.....	1
Anderson.....	15	Hansford.....	1	Runnels.....	1
Angelina.....	7	Hardeman.....	2	Rusk.....	1
Aransas.....	2	Hardin.....	4	Sabine.....	1
Archer.....	7	Harris.....	72	San Augustine.....	1
Armstrong.....	2	Harrison.....	27	San Jacinto.....	1
Atacosa.....	23	Haskell.....	3	San Patricio.....	1
Austin.....	17	Hays.....	24	San Saba.....	1
Bandera.....	16	Henderson.....	18	Scurry.....	1
Bastrop.....	32	Hidalgo.....	3	Shackelford.....	1
Baylor.....	3	Hill.....	44	Shelby.....	1
Bee.....	8	Hoed.....	25	Smith.....	1
Bell.....	67	Hopkins.....	81	Somervell.....	1
Bexar.....	183	Houston.....	28	Starr.....	1
Blanco.....	19	Howard.....	5	Stephens.....	1
Bosque.....	35	Hunt.....	60	Stonewall.....	1
Bowie.....	25	Jack.....	24	Tarrant.....	1
Brazoria.....	11	Jackson.....	11	Taylor.....	1
Crazos.....	21	Jasper.....	18	Throckmorton.....	1
Brown.....	26	Jefferson.....	10	Titus.....	1
Burleson.....	7	Johnson.....	55	Tom Green.....	1
Burnet.....	39	Jones.....	4	Travis.....	1
Baldwell.....	44	Karnes.....	7	Trinity.....	1
Calhoun.....	4	Kaufman.....	65	Tyler.....	1
Callahan.....	7	Kendall.....	13	Upshur.....	1
Cameron.....	24	Kent.....	2	Uvalde.....	1
Camp.....	10	Kerr.....	17	Val Verde.....	1
Cass.....	16	Kimble.....	5	Van Zandt.....	1
Chambers.....	3	Kinney.....	20	Victoria.....	1
Cherokee.....	26	Knox.....	1	Walker.....	1
		Lamar.....	78	Waller.....	1
		Lampasas.....	25	Washington.....	1
		La Salle.....	4	Webb.....	1

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>Texas—Continued.</i>		<i>Virginia—Continued.</i>		<i>Virginia—Continued.</i>	
Wharton	4	Campbell	32	Warwick	15
Wheeler	10	Caroline	19	Washington	22
Wichita	10	Carroll	12	Westmoreland	11
Wilbarger	15	Charles City	4	Wise	17
Williamson	57	Charlotte	8	Wythe	17
Wilson	15	Chesterfield	37	York	10
Wise	55	Clarke	10		
Wood	20	Craig	4	Total	3,723
Young	12	Culpeper	18		
Zapata	1	Cumberland	12	<i>Washington Territory.</i>	
Zavalla		Dickenson	2	Adams	13
Total	4,186	Dinwiddie	63	Asotin	15
<i>Utah Territory.</i>		Elizabeth City	1,553	Chehalis	41
Beaver	14	Essex	6	Clallam	17
Box Elder	12	Fairfax	70	Clarke	111
Cache	19	Fauquier	38	Columbia	38
Davis	9	Floyd	19	Cowlitz	39
Emery	7	Fluvanna	18	Douglas	16
Garfield	6	Franklin	15	Franklin	1
Iron	6	Frederick	48	Garfield	31
Juab	10	Giles	7	Island	6
Kane	9	Gloucester	8	Jefferson	22
Millard	7	Goochland	7	King	256
Morgan	1	Grayson	5	Kitsap	24
Pi Ute	4	Greco	1	Kittitas	40
Rich		Greenville	5	Klilkitat	34
Salt Lake	92	Halifax	20	Lewis	114
San Juan	1	Hanover	17	Lincoln	59
San Pete	17	Henrico	34	Mason	11
Sevier	7	Henry	13	Pacific	20
Summit	12	Highland	5	Pierce	186
Tooele	10	Isle of Wight	7	San Juan	11
Uintah	13	James City	4	Skagit	41
Utah	40	King and Queen	4	Skamania	8
Wasatch	2	King George	6	Snohomish	55
Washington	20	King William	8	Spokane	163
Weber	55	Lancaster	2	Stevens	18
Total	373	Lee	25	Thurston	54
<i>Vermont.</i>		Loudoun	53	Wahkiakum	7
Addison	509	Louisa	25	Walla Walla	93
Bennington	351	Lunenburg	12	Whatcom	62
Caledonia	609	Madison	8	Whitman	101
Chittenden	523	Mathews	13	Yakima	35
Essex	160	Mecklenburgh	16	Total	1,741
Franklin	514	Middlesex	13	<i>West Virginia.</i>	
Grand Isle	45	Montgomery	39	Barbour	77
Lamoille	434	Nansemond	33	Berkeley	70
Orange	539	Nelson	19	Boone	28
Orleans	658	New Kent	3	Braxton	114
Rutland	709	Norfolk	382	Brooke	41
Washington	864	Northampton	31	Cabell	172
Windham	489	Northumberland	5	Calhoun	78
Windsor	724	Nottoway	7	Clay	19
Total	7,128	Orange	22	Doddridge	177
<i>Virginia.</i>		Page	11	Fayette	29
Accomack	67	Patrick	14	Gilmer	88
Albemarle	47	Pittsylvania	26	Grant	27
Alexandria	85	Powhatan	5	Greenbrier	29
Alleghany	5	Prince Edward	14	Hampshire	25
Amelia	12	Prince George	6	Hancock	22
Amherst	33	Prince Anne	13	Hardy	9
Appomattox	20	Prince William	25	Harrison	227
Augusta	61	Pulaski	9	Jackson	272
Bath	7	Rappahannock	13	Jefferson	67
Bedford	26	Richmond	8	Kanawha	361
Bland	3	Roanoke	20	Lewis	134
Botetourt	10	Rockbridge	35	Lincoln	41
Brunswick	16	Rockingham	28	Logan	9
Buchanan	8	Russell	12	McDowell	26
Buckingham	19	Scott	26	Marion	286
		Shenandoah	19	Marshall	248
		Smyth	4	Mason	395
		Southampton	8	Mercer	6
		Spottsylvania	33	Mineral	71
		Stafford	11	Monongalia	206
		Surry	10		
		Sussex	9		
		Tazewell	12		
		Warren	14		

TABLE 18.—Showing the number of pensioners, etc.—Continued.

County.	No.	County.	No.	County.	No.
<i>West Virginia—Cont'd.</i>		<i>Wisconsin—Continued.</i>		<i>Wyoming Ter.—Cont'd.</i>	
Monroe.....	12	Jefferson.....	285	Sheridan.....	12
Morgan.....	44	Juneau.....	367	Sweetwater.....	12
Nichols.....	23	Kenosha.....	89	Uinta.....	27
Ohio.....	244	Kewaunee.....	88	Total.....	257
Pendleton.....	22	La Crosse.....	286	<i>Foreign countries.</i>	
Pleasant.....	104	La Fayette.....	181	Africa.....	1
Pocahontas.....	18	Langlade.....	73	Australia.....	16
Preston.....	353	Lincoln.....	79	Austria-Hungary.....	12
Putnam.....	135	Manitowoc.....	161	Belgium.....	11
Raleigh.....	44	Marathon.....	142	Bermudas.....	3
Randolph.....	24	Marinette.....	63	Brazil.....	1
Ritchie.....	170	Marquette.....	150	British Columbia.....	5
Roane.....	132	Milwaukee.....	1,526	Canada.....	1,039
Summers.....	27	Monroe.....	495	Cape Colony.....	5
Taylor.....	137	Oconto.....	116	Chili.....	1
Tucker.....	25	Otagamie.....	280	China.....	1
Tyler.....	215	Ozaukee.....	59	Costa Rica.....	1
Upshur.....	177	Pepin.....	102	Cuba.....	4
Wayne.....	118	Pierce.....	202	Denmark.....	11
Webster.....	22	Polk.....	112	Fiji.....	1
Wetzell.....	208	Portage.....	331	Ecuador.....	1
Wirt.....	111	Price.....	52	France.....	42
Wood.....	472	Racine.....	167	Germany.....	425
Wyoming.....	7	Richland.....	503	Great Britain.....	464
Total.....	6,198	Rock.....	390	Guatemala.....	1
<i>Wisconsin.</i>		St. Croix.....	203	Hawaiian Kingdom.....	17
Adams.....	134	Sauk.....	532	Holland.....	4
Asbland.....	97	Sawyer.....	26	Honduras.....	1
Barron.....	192	Shawano.....	93	India.....	16
Bayfield.....	35	Sheboygan.....	240	Italy.....	2
Brown.....	332	Taylor.....	51	Japan.....	1
Buffalo.....	152	Trempealeau.....	165	Liberia.....	2
Burnett.....	35	Vernon.....	311	Malta.....	2
Calumet.....	159	Walworth.....	318	Mauritius.....	1
Chippewa.....	290	Washburn.....	29	Mexico.....	17
Clark.....	255	Washington.....	93	Netherlands.....	2
Columbia.....	320	Waukesha.....	202	New Zealand.....	5
Crawford.....	254	Waupaca.....	337	Norway.....	14
Dane.....	503	Waushara.....	280	Peru.....	1
Dodge.....	285	Winnebago.....	416	Portugal.....	3
Door.....	92	Wood.....	164	Russia.....	2
Douglas.....	33	Total.....	15,450	Spain.....	4
Dunn.....	252	<i>Wyoming Territory.</i>		Sweden.....	23
Eau Claire.....	322	Albany.....	28	Switzerland.....	66
Florence.....	19	Carbon.....	29	United States of Co-	
Fond du Lac.....	359	Crook.....	19	lombia.....	2
Forest.....	20	Fremont.....	20	Turkey.....	4
Grant.....	627	Johnson.....	15	Uruguay.....	2
Green.....	347	Laramie.....	94	West India.....	3
Green Lake.....	171	National Park Reserva-		Unknown.....	27
Iowa.....	175	tion.....		Total.....	2,323
Jackson.....	217	Natrona.....	1		

A summary of Table 18.

Political divisions.	No.	Political divisions.	No.	Political divisions.	No.
Alabama.....	1,505	Kentucky.....	13,764	Oregon.....	1,597
Alaska Territory.....	6	Louisiana.....	1,412	Pennsylvania.....	46,561
Arizona.....	216	Maine.....	15,334	Rhode Island.....	2,125
Arkansas.....	3,882	Maryland.....	4,892	South Carolina.....	534
California.....	6,121	Massachusetts.....	20,272	Tennessee.....	8,782
Colorado.....	2,247	Michigan.....	24,245	Texas.....	4,186
Connecticut.....	6,203	Minnesota.....	8,528	Utah Territory.....	373
Dakota Territory.....	4,410	Mississippi.....	1,142	Vermont.....	7,128
Delaware.....	1,019	Missouri.....	20,897	Virginia.....	3,723
District of Columbia.....	4,197	Montana Territory.....	527	Washington Territory.....	1,741
Florida.....	940	Nebraska.....	8,538	West Virginia.....	6,198
Georgia.....	1,286	Nevada.....	145	Wisconsin.....	15,450
Idaho Territory.....	370	New Hampshire.....	6,680	Wyoming Territory.....	257
Illinois.....	36,595	New Jersey.....	9,303	Foreign countries.....	2,323
Indiana.....	42,553	New Mexico Territory.....	345	Grand total.....	489,725
Indian Territory.....	710	New York.....	47,235		
Iowa.....	20,885	North Carolina.....	1,674		
Kansas.....	20,588	Ohio.....	50,081		

TABLE 19.—Names of surviving widows of Revolutionary soldiers who have been regularly paid their pensions to June 4, 1889, with their ages and places of residence at that date.

Name of widow.	Age.	Name of soldier.	Service of soldier.	Post-office address of pensioner.		
				Town.	County.	State.
Aldrich, Lovey	89	Aldrich, Caleb	New Hampshire and Rhode Island troops.	Leslie	Ingham	Michigan.
Barnes, Freelore	93	Seeley, Jonathan	Vermont troops.	Waldron	Hillsdale	Do.
Betz, Elizabeth	96	Beck, Peter	Pennsylvania troops	Harrisburg	Dauphin	Pennsylvania.
Boston, Elizabeth	96	Boston, Christopher	North Carolina troops	Valleytown	Clarke	North Carolina.
Brown, Mary	84	Brown, Joseph	Pennsylvania troops	Knoxville	Knox	Tennessee.
Curtis, Susan	97	Curtis, Caleb	Massachusetts troops.	Topsham	Sagadahoc	Maine.
Debnay, Sarah	89	Debnay, John Q.	Virginia troops	Barry	Pike	Illinois.
Duncan, Esther S.	75	Damon, Noah	Massachusetts troops.	Plymouth Union	Windsor	Vermont.
Dumora, Jane	71	Merrill, James	Connecticut troops	Broadalm	Rutherford	New York.
Green, Nancy A.	88	Edens, Elias	South Carolina troops	Colletsville	Ripley	Indiana.
Gregg, Nancy	78	Gregg, William	Virginia troops	Pinckneyville	Caldwell	North Carolina.
Harrison, Jane	83	Harrison, James	South Carolina troops.	Titusville	Perry	Illinois.
Heath, Sally	84	Heath, William	North Carolina troops	Jonesboro	Pulaski	Kentucky.
Jones, Nancy	75	Darling, James	do	Darien	Washington	Tennessee.
Lockwood, Betsy	75	Mather, Joseph	Connecticut troops	Holston	Partridge	Tennessee.
Lowe, Eleanor	72	Lowe, Henry	Virginia troops	Newbern	Washington	Virginia.
Mayo, Rebecca	76	Mayo, Stephen	do	Elva	Pulaski	Do.
Morton, Olive C.	78	Finnan, Peter	New York troops	East Lattapel	Tuscola	Michigan.
Morse, Lucy	88	Morse, Abel	Connecticut troops	East Bethel	Windsor	Vermont.
Rains, Nancy	97	Reins, John	Virginia troops	Shady Grove	Windsor	Tennessee.
Richardson, Godfrey	88	Richardson, Godfrey	New York troops	East Bethel	Jefferson	Vermont.
Richardson, Nancy	86	Richardson, William	Massachusetts troops.	Newman	Monroe	Tennessee.
Salisbury, Maria A.*	84	Morgan, Abner	North Carolina troops	Parkley	Coweta	New York.
Smith, Meridy	73	Smith, William	Virginia troops	Manchester	Acomac	Georgia.
Snead, Mary	84	Snead, Rowland	Connecticut troops	Manitowish	Ontario	Virginia.
Turner, Asenudh	83	Darham, Samuel	New Hampshire troops	Linsback	Blue Earth	New York.
Wainford, Betsey	79	Wainford, Jonathan	Virginia troops	Easton	Carter	Minnesota.
Wetherman, Nancy	79	Gluscock, Robert	Pennsylvania troops	Easton	Northampton	North Carolina.
Young, Anna Maria	97	Young, Jacob				Pennsylvania.

* Daughters pensioned by special act.

REPORT OF THE COMMISSIONER OF RAILROADS.

DEPARTMENT OF THE INTERIOR,
OFFICE COMMISSIONER OF RAILROADS,
Washington, D. C., November 1, 1889.

SIR: In compliance with the statutory requirements of the act creating this Bureau (20 U. S. Stat., 169, sec. 3), I have the honor to submit the following report in regard to the Bureau and its operations, and of the condition of the property, business, and accounts of the several railroad companies coming under its supervision, which have made such reports to this office as have been called for under the law.

Several of the railroad companies which have received grants of public lands to aid in the construction of their roads decline to report to this office, for the reason that such grants were made by the respective States in which the roads are located and not by the United States, and claim that, therefore, they do not come within the language of the act of Congress creating this Bureau and defining its powers. The point made is that a grant to a State for a railroad is not a grant to the railroad company. The position taken by these companies would seem to be technical and evasive. The lands were owned by the United States, and were granted by acts of Congress to the States for the sole purpose of aiding in the construction of railroads. The companies received the full benefits of the grants. The certificates issued by the General Land Office for the land granted, name the railroads to whose use it is to be applied, but in some cases do not even name the State. My construction upon this clause of the act is that such grant is a subsidy as contemplated by the act. I have referred the subject to the Honorable Secretary of the Interior for instructions.

I have called upon all companies which I believe to be lawfully under the supervision of this Bureau to make reports to it, and have sent them the blank forms for the reports required.

As the law provides that one of the duties of this Bureau is "to see that the laws relating to said companies are enforced," it will be my duty to certify all cases of neglect or refusal under the law to the Secretary for the institution of proceedings necessary to judicially enforce the forfeitures therein provided.

As there had been no inspections and no examinations of the books and accounts of the railroads subject to the supervision of this Bureau made for the current year covered by this report, previous to my appointment as Commissioner (July 17, 1889), I have been unable to make the report as full and complete as it might otherwise have been. I shall endeavor, in any future annual reports which I may have the honor to make, to give a complete and detailed statement of the physical and financial condition of the railroad companies subject to the jurisdiction of this Bureau.

The past year has not been a prosperous one for the railroads, especially in the West. In most of the agricultural States in the Mississippi Valley and west of it there have been several successive years of partial, and in many sections almost total, crop failures. Continued droughts in some places and excessive rains in others, repeated and destructive storms, swarms of devouring pests, all these have combined to destroy or lessen the products of the soil. Inevitably following these fatalities to agriculture has come a general business depression, and no branch of business has suffered in a greater degree than

that of transportation. While perhaps to the decreased production of cereals, which form so large a share of the carrying trade, may be attributed a majority of the loss shown, yet other causes have been potential in seriously shrinking the total of the gross earnings of the railroads. Repeated and ruinous rate wars, destructive alike to the interests of the railroads and the shipping public, have prevailed to an alarming extent throughout the West in recent years. The unparalleled development of the vast resources of the Western States and Territories has attracted capital there, and railroads have opened inviting fields to investors. As a result, railroad building has been carried on far in advance of the needs of the country. Parallel lines and unproductive feeders have been constructed, and expensive terminal facilities secured. With the opening of nearly every through line new complications have arisen, and competition has been stimulated to the point of annihilating profits and often producing ruinous losses. That unwise or perverse management subverts legitimate and healthful competition into unreasoning and destructive warfare is not infrequently plainly apparent, but the knowledge of this fact brings no relief to the lessening revenues of the warring companies. These "rate wars" are in many, if not in most, cases devoid of palliation or excuse, inaugurated without reasonable cause, and vindictively prosecuted with an utter disregard of their disastrous effects upon the interests of the companies engaged and the business public. They destroy or imperil the value of railroad securities, impose unjust burdens upon the commerce of competing sections, prevent stability in business, and render the profits of the producer and trader alike uncertain.

I do not agree with the claim so persistently made by railroad managers that the recent losses sustained in railroad business are mainly due to the restrictive laws which have of late been enacted by Congress and in many of the Western States. Most of the legislation for the regulation of railway traffic within the States has been wisely conservative, and was as surely demanded for the protection of the public against unjust charges and discrimination in local trade as was the interstate commerce law to protect commerce between the States.

The theory that the recognized laws of trade would ultimately so far prevail as to sufficiently regulate the management of railroads in the interest of the public, has not proven to be a correct one. Events have demonstrated that these laws have become practically inoperative, and that it is necessary to invoke legislation to supplement the operations of natural laws in establishing the legitimate rights and curbing the unwarranted pretensions of transportation companies. The exceedingly unfortunate situation which has of late prevailed in the West and Northwest presents a vivid illustration, and gives an expensive, though an apparently unheeded, lesson as to the effects of unregulated competition. Unless conditions are changed through the voluntary actions of the railway companies, or by legislative interference, commercial relations will be seriously disturbed, and lasting injuries inflicted upon the railroads and upon every department of trade.

I believe that in many sections of the West, conspicuously in the States of Iowa and Kansas, the mileage of roads is greatly in excess of the legitimate needs of the carrying trade. If this be true, then many of the investments in railroad properties there must fail to yield remunerative dividends, or the schedules of rates be fixed so high as to prove ruinously burdensome to traffic. For this unfortunate condition of affairs neither the people nor the railroad companies are wholly to blame. Both have contributed to bring it about. The people have en-

couraged railroad construction wherever it could be secured, regardless of existing necessities or future complications, and the railroad companies have been unduly eager to control trade by building new lines and feeders for established ones where the volume of traffic was not sufficient to support them. This condition of things presents a problem difficult of solution. It is safe to say that the remedy does not lie in the levying of extortionate charges or the waging of reckless rate wars. The security of the railway system lies in administering it with careful respect to justice and the public welfare. If its oppressive hand is laid too heavily upon the people, revenge and revolt will be sure to follow. If investors in railroad properties have expended their capital in the construction of lines not demanded by the present trade, then they must share the fate of all who invest in unproductive enterprises. Relief can only come through increased settlement stimulating business and developing natural resources.

The law creating this Bureau requires the Commissioner "to furnish such information to the several departments of the Government in regard to tariffs for freight and passengers as may be by them required, or as he may deem expedient for the interests of the Government."

The passage of the interstate commerce law creating a Commission expressly to regulate the traffic of railroads relieves this Bureau from the necessity of giving information or making recommendations as to rates. However, I wish to make the general suggestion that in my opinion the interests of both the railroads and the public suffer from the fact that railroad managers devote their energies too largely to the securing of trade from competing centers, and do not sufficiently encourage the development of local traffic.

At least two of my predecessors in office have recommended the enactment of a law providing for the funding of the debts of the bonded roads. These recommendations have been approved by Secretaries of the Interior and Treasury in their reports, and by President Cleveland in a message to Congress. The questions involved are serious and important, and I am of the opinion that the time has arrived for some positive legislation.

Substantially the recommendations made by the officers mentioned have been embodied in bills and presented in Congress, but no final action has been had on them. It has been found that the legislation establishing a sinking fund and providing for the payment of a certain per cent. of the net earnings of the roads into it will not realize the end sought, the payment of accruing interest and the final extinguishment of the debts due the Government. The plan heretofore proposed is, in short, to fund the whole remaining debt and interest in obligations of fixed amounts and maturity. Time is of small importance compared with security in the adjustment of these matters. Should a funding bill be presented to Congress at the forthcoming or at any subsequent session, it should be carefully guarded so as to protect fully the interests of the Government, and to impose no unreasonable obligations or undue hardships upon the railroad companies. It is very clear to my judgment that there should be an extension of time and a reduction in the rate of interest. I am not thoroughly convinced that the end sought can be best attained by the passage of a funding bill providing for regular fixed payments. Successive crop failure or years of business depression might render the companies unable to meet their obligations. Such legislation should be enacted as will best enable the companies to eventually discharge their indebtedness to the Government. It would be unfortunate, indeed, to both the railroad companies and the Government,

should Congress impose such arbitrary conditions in regard to fixed payments as might render compliance on the part of the companies practically impossible. Such unwise legislation might make it necessary for the Government to pay off all liens prior to its own and take possession of the roads, a condition of things that it is certainly desirable to avoid.

In the very limited time I have been able to devote to the subject, I have come to the conclusion that the most feasible plan to be adopted is to grant a reasonable extension of time, with a reduced rate of interest, and require the payment of a certain per cent. of the *gross* earnings of the roads to be applied in liquidation of their indebtedness to the Government. This would relieve the railroad companies from the embarrassment that might come to them were they required to pay fixed sums at stated periods. In times of business depression, when their receipts were light, their obligations to pay would be correspondingly reduced, while in prosperous years, when their business was large, they could afford to make increased payments. In the business of transportation, as in other departments of trade, a series of years can be wisely depended upon to bring an *average* activity upon which an intelligent estimate may be safely made. I believe there is a strong argument in favor of making the plan of payment elastic rather than arbitrary. To require that payments be made from a percentage of the *gross* rather than of the *net* earnings of the roads will avoid many serious complications in determining the exact amounts to be paid. All of the railroad companies indebted to the Government own or lease and operate various lines and branches in addition to those subsidized. The Government has no claim upon any part of the earnings of these non-subsidized lines. The result is that traffic may be diverted, either naturally or with a purpose, from the aided to the non-aided lines, and that various charges in the expense accounts may be entered as against the aided portions of the road that rightfully should be chargeable to the non-aided portions. In either event, whether by diversion of traffic or the manipulation of accounts, the same result follows, a reduction in the net earnings of the subsidized lines. The attempt to change this condition of things would be met with many almost insurmountable difficulties of both law and fact.

It is apparent beyond controversy that the subsidized roads can not discharge their obligations to the Government at maturity. Existing laws are wholly inadequate to secure the payment of the debts due and shortly to become due. It is imperative that Congress provide some measure of relief. It is my opinion that it would be wise to pass an act giving a reasonable extension of time, reducing the rate of interest to 3 or 4 per cent., requiring that the earnings from all Government transportation by the subsidized companies on all lines operated by them, whether aided or non-aided, should be applied to the payment of any interest or principal due or to become due within the fiscal year in which the services might be rendered; prohibiting the payment of any dividends by either of the subsidized companies, unless such company shall have paid all interest on its bonded debt having a lien prior to that of the Government, and all matured indebtedness and interest then due and payable on its debt to the United States; and exacting the payment of such a percentage of the gross earnings of the subsidized lines as, by careful estimates, would realize sums sufficient to pay accruing interest and raise a sinking fund that would meet the principal of the debts at their maturity. The said companies should also be permitted to refund their first-mortgage bonds under such provisions as would prevent any

increase in the debt which is allowed priority over the debt to the United States.

I believe it to be extremely desirable that the act creating this Bureau be further amended by providing that the so-called bonded roads transmit all accounts for transportation services rendered the Government, including the carrying of the mails, through this office to the proper accounting officers of the Treasury; and that all disallowances or differences in said accounts found by the accounting officers upon settlement be reported to this office before final payment or allowance of the same; and that this office report to the Treasury Department what changes, if any, are required in the payment or disposal of the moneys so found to be due the said companies.

It is important that there be *some* bureau of the Government in which can be found full information as to the accounts between the bonded railroads and the United States. Up to the present time there has been no such bureau. Out of the numerous acts affecting the roads in question there has grown much confusion. The Post-Office, War, Treasury, and Interior Departments each have extensive dealings with these roads. Bills for services rendered are sent for adjustment to many different accounting officers, each acting independently of the others. There are now millions of dollars of unsettled bills awaiting final action in the Treasury Department. It is due to the railroad companies that all these accounts for services be promptly adjusted, and that such sums as are legally their due be credited or paid to them. It is to the interest of the Government to know the exact condition of its accounts with the railroad companies it has aided and whose obligations it holds. As accounts are rendered at present, it would be a vexatious and almost impossible task to secure such information. Were all accounts rendered through this Bureau by the railroad companies, and the action taken by the accounting officers reported here, all of which might be done with no increased expense, then the records of this Bureau would at all times give easy access to any information that might be desired by Congress or any of the Departments of the Government, in regard to the accounts and indebtedness of the bonded roads.

The subject of a uniform system of accounts has caused much vexation to the accounting officers of the various railways throughout the country for several years past, and numerous efforts have been made looking toward the adoption of a standard for the distribution of operating expenses.

Many of the lines pass through several States and Territories, and the railroad commissioners of each State have required a distinctive report to be submitted to them, showing the operations of the roads on almost as many bases as there were commissioners. There was no uniformity as to the distribution of items of expense, nor as to the fiscal year for which reports should be rendered. In addition to these requirements, this Bureau, in 1885, adopted a classification of operating expenses which embraced 186 items, as it was deemed essential that the so-called "bonded roads" should furnish all the details of expense connected with their operations, but it applied also to those roads which had received aid in lands only, and in which the Government had no pecuniary interest. Many of these companies, at great expense, complied with this requirement, but a large number of them paid no attention whatever to this classification, and furnished only such information as they considered necessary. As it is customary for the book-keepers of this Bureau to make annually a careful examination of the books and accounts of the bonded railroads and to prepare detailed statements of

all expenses connected with their operations, it would appear that this requirement was excessive and unnecessary, and it has therefore been modified.

The Interstate Commerce Commission has adopted a classification of operating expenses embodying forty-five items under four general heads, and has fixed the fiscal year ending June 30 as the period for which reports should be rendered. At a conference recently held in Washington, the State railway commissions also adopted the same fiscal year for the annual reports to be rendered them, but they have not finally adopted the same classification of operating expenses. The act of June 19, 1878, requires that this Bureau shall, on the 1st day of November, submit a report "on the condition of each of said railroad companies, their roads, accounts, and affairs, for the fiscal year ending June 30, immediately preceding."

In the interest of uniformity, this Bureau has adopted the same classification of expenses as that prescribed by the Interstate Commerce Commission, but does not require a division of all operating expenses between the passenger traffic and freight traffic.

The grouping of the expenses under the four headings of maintenance of way and structures, maintenance of equipment, conducting transportation, and general expenses, seems to have a natural basis, and will afford an idea of the standard at which the property is maintained, the cost of actual operation, and the remaining expenses not directly dependent upon the volume of traffic or the condition of the property.

The book-keepers of this Bureau have fully investigated the books and accounts of the bonded roads, and statements are submitted herewith showing in detail their earnings and expenses and general financial condition, including the amounts due the Government on their net earnings for the year ending with this report, as well as the balances due on previous years. As a rule the accounts of the roads are kept in a thoroughly businesslike manner. The officers of the roads have cheerfully given free access to their books when requested, furnished all information asked for, and submitted all vouchers it was desired to examine.

UNION PACIFIC RAILWAY COMPANY.

The Union Pacific Railway Company was formed January 24, 1880, by the consolidation of the Union Pacific Railroad, the Kansas Pacific Railway, and the Denver Pacific Railway and Telegraph Company, and embraces 1,821.43 miles of road. It also controls and operates nineteen branch lines, 3,131.50 miles in length, making an aggregate of 4,952.93 miles in the system. The main line from Omaha, Nebr., to Ogden, Utah, and a portion of the Kansas Division, from Kansas City to the three hundred and ninety-fourth mile-post, were aided by the United States with bonds and lands, and are subject to the requirements of law with respect to paying annually a percentage of net earnings to the Government.

The subsidy bonds issued to this company to aid in its construction amount to \$33,539,512, the Union Division having received \$27,236,512, and the Kansas Division \$6,303,000. The United States had paid in interest thereon, \$43,161,407.82. There had been repaid by the company, in transportation services and cash payments, as shown by the books of the Treasury Department, the sum of \$25,431,127.36, which made its liability to the Government June 30, 1889, amount to \$51,269,792.46. The excess of interest paid by the United States over all credits amounted to \$17,730,280.44.

During the year 6,741 tons of steel rails were laid, at a cost of \$213,328.76, and 728,559 cross-ties were laid, at a cost of \$416,668.61. There were consumed 650,542 tons of coal, at an average cost of \$1.73 per ton, and 9,248.75 cords of wood, at an average cost of \$2.25 per cord.

The ballast consists of 22.89 miles of stone, 18 miles of gravel, 4.86 miles of burnt clay, 28.29 of cinders, and the remainder of earth.

The rolling stock consists of 487 locomotives, 443 of which are equipped with Westinghouse automatic brakes; a three-fourths interest in 66 Pullman cars; 164 passenger cars, 74 emigrant, 99 baggage, mail and express, and 12 officers' cars, making a total of 415 cars in the passenger department, all of which are equipped with Westinghouse brakes and Miller platforms. There are 5,673 box, 1,076 stock, 1,929 coal, 488 flat, 132 combination stock, 427 refrigerator, 25 fruit, 700 furniture, and 204 caboose cars, making a total of 10,654 cars in the freight department, 8,517 of which have Westinghouse automatic brakes. There are 231 cars used in road repair service. The equipment owned by the American Loan and Trust Company of Boston is included in the above.

On June 30, 1889, the company had disposed of 13,130,414.65 acres of land, the total cash receipts from all sales amounting to \$31,325,294.90. There remained outstanding on account of time sales the sum of \$11,661,676.14. The average price per acre from all sales was \$2.54 for the Union Division, \$3.78 for the Kansas Division, and \$4.26 for the Denver Division.

In order to provide for the more economical management of several of the principal branch lines in which the Union Pacific Railway Company has a controlling interest, the Oregon Short Line Railway, the Utah and Northern Railway, the Utah Central Railway, the Salt Lake and Western Railway, the Utah and Nevada Railway, the Ogden and Syracuse Railway, the Idaho Central Railway, and the Nevada Pacific Railway Companies entered into an agreement July 27, 1889, to form and consolidate their respective organizations, capital stock, railroads, property, and franchises of every nature and description into one company, which shall continue in existence for a period of fifty years, unless sooner disincorporated, and which shall be called and known by the corporate name of the "Oregon Short Line and Utah Northern Railway Company." This agreement of consolidation has been duly ratified by a vote of more than two-thirds of the entire capital stock of each company.

The railroad and its appurtenances was carefully inspected by the engineer in August last, and found to have been maintained in its usual excellent condition. The details of all improvements made during the year will be found in his report herewith.

The following statements show the financial condition of the company June 30, 1889:

Ab 89—36

Comparative statement of funded debt of the Union Pacific Railway Company June 30, 1889-1888.

Class of bonds.	Term of bonds.		Rate of interest.	Amount of bonds outstanding.		Difference.		Lien on—	
	Years.	Date of maturity.		June 30, 1889.	June 30, 1888.	Increase or decrease.	Amount.		
<i>Union Pacific Railway Company.</i>									
Union Pacific, first mortgage.....	30	1896-1899	<i>Per cent.</i>	\$27,229,000.00	\$27,229,000.00	.....	.....	Road and franchise, Omaha to Ogden.
United States subsidy, second mortgage.....	30	1896-1899	6	27,236,512.00	27,236,512.00	.....	.....	Do.
Land-grant mortgage.....	20	1887-1889	7	38,000.00	1,057,000.00	Decrease.....	\$1,019,000	Granted lands.	
Sinking-fund mortgage, coupon.....	20	1893	8	10,055,000.00	12,221,000.00	Decrease.....	2,166,000	Road and franchise, Omaha to Ogden,	
Sinking-fund mortgage, registered.....	20	1893	8	4,160,000.00	1,996,000.00	Increase.....	2,164,000	third mortgage; granted lands, second	
Collateral trust, 6 per cent.....	29	1908	6	4,142,000.00	4,252,000.00	Decrease.....	110,000	mortgage.	
Omaha Bridge.....	25	1896	8	1,167,000.00	1,293,000.00	Decrease.....	126,000	Bonds of branch lines held by trustees.	
<i>Kansas Pacific Railway Company.</i>									
Eastern division, first mortgage.....	30	1895	6	2,240,000.00	2,240,000.00	.....	.....	Omaha Bridge, first mortgage.
Middle division, first mortgage.....	30	1896	6	4,063,000.00	4,063,000.00	.....	.....	Road and income, Kansas City to a point
United States subsidy, second mortgage.....	30	1895-1898	6	6,303,000.00	6,303,000.00	.....	.....	140 miles west.
Denver Extension, first mortgage.....	30	1899	6	6,028,000.00	6,084,000.00	Decrease.....	56,000	Road and income, 140 1/2 mile-post to 394th	
Leavenworth Branch, first mortgage.....	30	1896	7	18,000.00	18,000.00	.....	.....	mile-post.
Leavenworth Branch, coupon certificates.....	12	1886	6	70.00	70.00	.....	.....	Road and franchise, Kansas City to 394th
Denver Extension, coupon certificates.....	12	1886	6	385.00	385.00	.....	.....	mile-post.
Income.....	50	1916	7	45,950.00	45,950.00	.....	.....	Road and lands, 394th mile-post to Denver.
Income (subordinated).....	50	1916	7	62,250.00	62,250.00	.....	.....	Leavenworth Branch.....
Consolidated mortgage.....	40	1919	6	12,931,000.00	13,655,000.00	Decrease.....	724,000	Do.	
<i>Denver Pacific Railway and Telegraph Company.</i>									
First mortgage and land grant.....	30	1899	7	8,000.00	8,000.00	.....	.....	Do.
<i>Union Pacific Railway Company.</i>									
Trust 5 per cent., coupon.....	24	1907	5	5,235,000.00	5,366,000.00	Decrease.....	131,000	Blanket mortgage, 779 miles of road and	
Trust 5 per cent., registered.....	24	1907	5	18,000.00	18,000.00	.....	.....	394 miles of land grant.
Omaha Bridge renewal, second mortgage.....	21	1906	5	451,000.00	328,000.00	Increase.....	126,000	Cheyenne Branch, road and lands.	
Equipment trust, series A.....	1 to 10	1889-1897	5	645,000.00	716,000.00	Decrease.....	71,000	Bonds of branch lines held by trustees.	
Equipment trust, series B.....	1 to 10	1889-1898	5	1,826,000.00	.....	Increase.....	1,826,000	Omaha Bridge.
Total funded debt.....									Equipment held by the American Loan and Trust Company, of Boston, as trustee.
				113,906,167.00	114,193,167.00	Net decrease	287,000		

Revenues and expenditures of the Union Pacific Railway Company for the year ending June 30, 1889.

REVENUES.

Earnings	\$18,962,598.00
Dividends on stocks of other companies	466,972.50
Interest on bonds of other companies	888,675.67
Interest and income from miscellaneous investments	322,369.51
Receipts of the land department and trust income	1,409,310.08
Miscellaneous land receipts	20,893.49
Total	22,070,819.25

EXPENDITURES.

Operating expenses and taxes	\$11,350,766.34
Interest on first-mortgage bonds and other funded debt	5,017,431.00
Interest on other debt	58,421.04
Losses on miscellaneous investments	251,422.69
Profit and loss	130,003.52
Sinking-fund requirements, company	747,825.00
New construction	446,093.97
New equipment	2,390,947.45
Expenses of the land department	433,391.71
United States requirement	1,047,393.96
Premium on bonds redeemed, etc	214,151.91
Total	22,137,848.59
Deficit	67,029.34

Comparative statement of the financial condition of the Union Pacific Railway Company June 30, 1889-1888.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
LIABILITIES.				
First-mortgage bonds	\$43,224,000.00	\$40,935,000.00	Increase.....	\$2,289,000.00
Interest on same	1,344,940.83	1,260,885.00	Increase.....	84,055.83
United States subsidy bonds	33,539,512.00	33,539,512.00	.....	.....
Interest on same, paid by United States	43,161,407.82	41,149,037.10	Increase.....	2,012,370.72
Other funded debt	37,142,655.00	39,718,655.00	Decrease.....	2,576,000.00
Interest on same	758,018.41	777,417.48	Decrease.....	19,399.07
Dividends unpaid	23,117.27	24,554.77	Decrease.....	1,437.50
Bills payable	3,459,834.18	4,980,000.00	Decrease.....	1,520,165.82
Accounts payable	1,156,245.07	1,694,290.58	Decrease.....	538,045.51
Pay-rolls and vouchers	1,818,928.96	2,196,884.84	Decrease.....	377,955.88
Called bonds	29,000.00	136,000.00	Decrease.....	107,000.00
Total debt.....	165,657,652.54	166,412,236.77	Decrease.....	754,577.23
Capital stock	60,868,500.00	60,868,500.00	.....	.....
Total stock and debt	226,526,159.54	227,280,736.77	Decrease.....	754,577.23
ASSETS.				
Cost of road, fixtures, and equipment	\$166,178,339.63	\$163,341,298.21	Increase.....	\$2,837,041.42
Land contracts, land cash, etc.	17,759,388.33	20,477,783.01	Decrease.....	2,718,394.68
Fuel, material, and stores on hand	1,551,333.45	1,738,599.05	Decrease.....	187,265.60
Cash on hand	882,570.78	1,307,748.23	Decrease.....	425,177.45
Company's stocks and bonds, owned by company	574,088.31	1,242,889.58	Decrease.....	668,801.27
Other stocks and bonds, owned by company	43,612,885.56	44,912,636.22	Decrease.....	1,299,750.66
Miscellaneous investments	875,636.24	835,756.61	Increase.....	39,879.63
Advances payable in stocks and bonds	3,555,568.10	5,386,139.87	Decrease.....	1,830,571.77
Sinking-fund in hands of trustees	4,186,811.21	1,735,235.79	Increase.....	2,451,575.42
Bills receivable	391,233.84	931,234.84	Decrease.....	540,000.00
Accounts receivable	9,294,996.43	6,350,023.84	Increase.....	2,944,972.59
Due from other companies, traffic acc't	584,302.09	467,136.28	Increase.....	117,165.81
Repaid the United States, unsettled accounts, etc	25,857,569.60	24,556,174.59	Increase.....	1,301,395.01
Total assets	275,304,723.57	273,282,655.12	Increase.....	2,022,068.45
Surplus.....	48,778,564.03	46,001,918.35	Increase.....	2,776,645.68

The company claims, in its general balance-sheet, credit for services rendered to the Government amounting to \$25,857,569.60, but the following statement compiled from reports furnished by the Treasury Department of settled accounts and money paid into the Treasury to June 30, 1889, shows a difference of \$426,442.24, as follows:

Transportation applied to interest account.....	\$15,693,865.43	
Cash payments applied to interest account.....	438,409.58	
Total interest account		\$16,132,275.01
Transportation applied to sinking fund.....	6,660,564.41	
Cash payments applied to sinking fund.....	1,421,714.46	
Accumulated interest on sinking-fund investments ...	1,216,573.48	
Total sinking-fund account		9,298,852.35
Total credits to June 30, 1889.....		25,431,127.36
Amount of credits claimed by company.....		25,857,569.60
Difference		426,442.24

Comparative statement of the earnings and expenses of the Union Pacific Railway Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$4,400,812.30	\$4,803,944.05	Decrease	\$403,131.75
Freight	12,849,982.96	13,700,499.03	Decrease	850,516.07
Mail	622,968.59	634,297.13	Decrease	11,328.54
Express	481,367.75	506,397.00	Decrease	25,029.25
Miscellaneous	607,466.40	363,941.22	Increase	243,525.18
Total	18,962,598.00	20,009,073.43	Decrease	1,046,480.43
EXPENSES.				
Conducting transportation	3,545,432.65	3,382,354.45	Increase	163,078.20
Maintenance of way.....	1,790,176.43	1,631,438.72	Increase	158,737.71
Motive power	3,626,091.40	3,690,397.73	Decrease	64,306.33
Maintenance of cars	1,193,323.47	1,166,459.79	Increase	26,863.68
General expenses and taxes	1,195,742.39	1,017,526.03	Increase	178,216.36
Total	11,350,766.34	10,888,176.72	Increase	462,589.62
Net earnings	7,611,831.66	9,120,901.71	Decrease	1,509,070.05
Average miles operated	1,822.12	1,823.93	Decrease	1.81
Earnings per mile	\$10,406.88	\$10,970.31	Decrease	\$563.43
Expenses per mile.....	6,229.42	5,969.62	Increase	259.80
Net earnings per mile	4,177.46	5,000.69	Decrease	823.23
Percentage of expenses to earnings ...	59.86	45.58	Increase	14.28

No cash payments have been made by the Union Pacific Railway Company since December 4, 1886, at which time there was deposited with the Assistant Treasurer of the United States at Boston, Mass., the sum of \$155,246.59, being the cash balance necessary to make up the percentage of net earnings due the Government for the year 1885.

In 1886 there was a controversy between the Union Pacific Railway Company and the Commissioner of Railroads as to the amount rightfully due the Government under the laws. It was claimed by the railway company that certain of its net earnings derived from the operations of the Omaha bridge and from a contract with the Pullman Car

Company for the running of Pullman cars were not liable to the payment of 25 per cent. to the Government. The contention made by the railway company as to the Omaha bridge earnings was that the bridge formed no part of the *aided* line, and that under the decisions of the courts the net earnings from which a percentage was required by the laws to be paid to the Government was limited to earnings "derived from the aided roads or aided portion of a company's road without including the earnings of the non-aided parts." The railway company received no bonds from the Government to aid in the construction of the Omaha bridge. The company, in a brief presented to the Honorable Secretary of the Interior, to whom the matters in controversy had been referred by the Commissioner, cited decisions of both the Court of Claims and of the Supreme Court of the United States to the effect that the percentages collected by the United States are to be collected from the net earnings of the aided lines, and, in the language of the court, "have no connection with any additional roads and business which the companies may have undertaken, but in regard to which no aid was received."

It appears that the original statute under which the bridge was built, together with the order of the President designating the eastern terminus, required the main line to be constructed from a point on the eastern bank of the Missouri River, in the State of Iowa, and the Supreme Court have decided that the bridge is a part of the railroad, and that the company is bound to operate and run the whole road, including the bridge, as one connected and continuous line, by virtue of the provisions of the original act. The bridge may not have received direct aid, but it forms a part of the aided line.

In his letter to the president of the Union Pacific Railway Company, under date of November 19, 1886, the Honorable Secretary says:

It can not be conceived that it was the intention of Congress in this provision to permit the terminal expressly prescribed to the road which it thus created to be left, in the event of a foreclosure, in the hands of other owners to cut off the advantages which belong to the road. Especially important must this eastern terminal have been regarded, since it was fixed upon the eastern bank of the Missouri River, evidently because the railroad crossing of that stream was an essential feature of the great overland national highway projected.

The distinction contained in the case of the United States *vs.* the Central Pacific Railroad Company, referred to by you, appears to be between the "original road" mentioned in the act of Congress and such other roads as the same company acquired in addition to the original road; and not that any part of the original road required to be built by the act of Congress should be excepted from the operation of the mortgage, of the obligation to carry the mails, etc., and apply the compensation to the payment of the bonds and interest.

I think, without presenting other arguments, the simple language of the statute with its binding interpretations by the court leaves no opportunity for question.

Under this ruling, in computing the amount due from the railway company to the Government on its net earnings, I have included 25 per cent. of the earnings of the Omaha Bridge, after deducting from such earnings the necessary expenses actually paid within the year in operating the same and keeping it in a state of repair.

In the matter of the running of Pullman cars the railway company claimed that it was an "additional business" outside of the ordinary business of operating the road, and as the Government contributed nothing towards the capital invested under the Pullman contract, it was therefore not entitled to a percentage of the net earnings of the Pullman cars. This view of the case does not seem to be a correct one and is not sustained. It is held that whatever gains arise from the use of the railroad properly equipped to perform the business demanded of

it are the gains of ordinary railroad operation, and that there can be no exceptions made in case of the earnings derived from the extra fare paid for sleeping berths in the Pullman cars run by the railway company. In computing the amount due from the company I have included all earnings from sleeping cars, allowing credit for operating expenses (which appear in the general expense account) and for the amount invested in the purchase of the cars, the same as credit is given for the amounts invested in the purchase of ordinary rolling-stock and equipment.

The sum of \$2,102,582.30, claimed to have been expended for new equipment during the year ending December 31, 1888, has been excluded as not being a proper deduction under section 1 of the act of May 7, 1878.

In order to provide for the large amount of new equipment, both motive power and cars, which was necessary to accommodate the rapidly increasing traffic, the company issued its obligations, secured by a trust covering the equipment thus purchased. These obligations appear in the general balance sheet of the company as a funded debt and are described as "equipment trust bonds." In their report to this Bureau this equipment is described as "not owned," but a foot-note states that it is owned by the American Loan and Trust Company, of Boston, as trustee. As the company has not actually paid out the money, but merely given its obligations payable at a future time (10 years), and as the equipment is not owned, the sum above alluded to has been excluded as not being a "necessary expense actually paid within the year in operating the same and keeping the same in a state of repair."

Under the terms of the indenture a sum equal to one-tenth of the outstanding equipment trust-bonds is payable in each year. Credit has therefore been allowed for bonds redeemed during the year amounting to \$71,000, and the further sum of \$45,762.56 paid during the corresponding period as interest on the outstanding bonds of this character, both items being distributed between the aided and non-aided portions of the road on the basis of revenue train-mileage. As the company retires this indebtedness due credit will be allowed in each year for the bonds so redeemed.

No demand having been made by my predecessor for the payment by the company of amounts found due for the years 1886 and 1887, and on account of the differences which have already been explained, I have caused the accounts for those years to be restated and certain credits allowed. The following statements show the amounts found to be due for the years 1886, 1887, and 1888, under my interpretation of the act of May 7, 1878, with respect to the necessary expenses actually paid in operating the road and keeping it in a state of repair.

Statement of the amounts due the United States by the Union Pacific Railway Company for the year ending December 31, 1886, under the act of May 7, 1878.

UNION DIVISION.

EARNINGS.

United States:

Passenger	\$82,357.44
Freight.....	135,449.97
Mail.....	460,819.81
Express	743.67
Telegraph	977.38

\$680,348.27

Commercial.

Passenger	\$2,571,335.41
Sleeping cars*	107,834.02
Extra baggage	43,725.28
Freight	7,780,503.82
Company freight	471,546.88
Express	316,689.35
Telegraph	2,059.15
Miscellaneous	205,996.02
	<hr/> \$11,499,689.93

Total earnings..... 12,180,038.20

EXPENSES.

Conducting transportation	1,605,821.26
Maintenance of way	1,322,306.67
Motive power	2,118,470.37
Maintenance of equipment	673,867.94
General expenses and taxes	1,134,386.92
	<hr/>
Total operating expenses	6,854,853.16
Interest on first mortgage bonds	1,633,740.00
New construction	544,808.20
New equipment†	671,759.13
	<hr/>

Total expenses under act of May 7, 1878..... 9,705,160.49

Net earnings..... 2,474,877.71

Twenty-five per cent. equals 618,719.43

DUE THE UNITED STATES.

One-half Government transportation as above	\$340,174.13
Five per cent of net earnings	123,743.89
	<hr/>

To credit of bond and interest account..... 463,918.02

One-half Government transportation as above..... 340,174.14

To credit of sinking fund account..... 340,174.14

Total for the year..... 804,092.16

KANSAS DIVISION—AIDED ROAD.

EARNINGS.

United States:	
Passenger	\$5,830.65
Freight	10,742.96
Mail	68,791.29
Express	101.70
	<hr/>
	\$85,456.60

Commercial:

Passenger	1,017,672.25
Sleeping-cars‡	18,558.50
Extra baggage	11,808.81
Freight	2,769,268.90
Company freight	73,410.53
Express	82,098.37
Miscellaneous	34,958.52
	<hr/>
	4,007,775.88

Total earnings..... 4,093,232.48

* Apportioned on the basis of sleeping-car mileage, being 54.27 per cent. of \$198,699.14, income from sleeping-cars.

† Including the sum of \$229,562.10, being 54.27 per cent. of \$423,000 expended for a three-fourths interest in certain Pullman sleeping-cars, apportioned on basis of sleeping-car mileage.

‡ Apportioned on the basis of sleeping-car mileage, being 9.34 per cent. of \$198,699.14, income from sleeping-cars.

EXPENSES.

Conducting transportation	\$530,402.36
Maintenance of way	488,358.64
Motive power	589,139.70
Maintenance of cars	198,388.69
General expenses and taxes	315,564.61
Total operating expenses	2,121,854.00
New construction	19,317.92
New equipment*	208,339.66
Total expenses under act of 1864	\$2,349,511.58

Net earnings	1,743,720.90
Five per cent. of net earnings	87,186.05

DUE THE UNITED STATES.

Five per cent. of net earnings	87,186.05
One-half Government transportation as above	42,728.30
Total	129,914.35

DUE FROM THE UNION PACIFIC RAILWAY COMPANY.

On account of Union Division	804,092.16
On account of Kansas Division	129,914.35
Total	934,006.51

Statement of the amounts due the United States by the Union Pacific Railway Company for the year ending December 31, 1887, under the act of May 7, 1878.

UNION DIVISION.

EARNINGS.

United States:		
Passenger	\$50,538.21	
Extra baggage	1,179.33	
Freight	90,534.09	
Mail	485,240.62	
Express	434.71	
		\$627,926.96
Commercial:		
Passenger	2,758,581.16	
Sleeping-cars †	102,361.14	
Extra baggage	48,182.86	
Freight	9,146,666.45	
Company freight	339,733.84	
Express	332,272.65	
Miscellaneous	142,035.29	
		12,869,833.39
Total earnings		13,497,760.35

EXPENSES.

Conducting transportation	1,769,765.43
Maintenance of way	1,081,110.40
Motive power	2,370,364.84
Maintenance of cars	699,875.49
General expenses and taxes	1,222,867.84
Total operating expenses	7,143,984.00

* Including the sum of \$39,508.20, being 9.34 per cent. of \$423,000, expended for a three-fourths interest in certain Pullman sleeping-cars, apportioned on basis of sleeping-car mileage.

† Apportioned on the basis of sleeping-car mileage, being 53.09 per cent. of \$192,806.82, income from sleeping-cars.

Interest on first-mortgage bonds.....	\$1, 633, 740. 00
New construction.....	470, 161. 77
New equipment.....	157, 507. 49
Total expenses under act of May 7, 1878.....	\$9, 405, 393. 26
Net earnings.....	4, 092, 367. 09
Twenty-five per cent. of net earnings.....	1, 023, 091. 77

DUE THE UNITED STATES.

One-half Government transportation, as above.....	\$313, 963. 48
Five per cent. of net earnings.....	204, 618. 35
To credit of bond and interest account.....	\$518, 581. 83
One-half Government transportation, as above.....	313, 963. 48
Cash payment under section 4, act of May 7, 1878.....	190, 546. 46
To credit of sinking-fund account.....	504, 509. 94
Total for the year.....	1, 023, 091. 77

KANSAS DIVISION—AIDED ROAD.

EARNINGS.

United States:	
Passenger.....	\$4, 612. 92
Freight.....	5, 501. 75
Mail.....	79, 745. 54
Express.....	139. 86
Telegraph.....	25. 32
	\$90 025. 39
Commercial:	
Passenger.....	1, 201, 284. 30
Sleeping cars*.....	22, 659. 00
Extra baggage.....	12, 957. 38
Freight.....	2, 541, 107. 45
Company freight.....	109, 422. 12
Express.....	104, 189. 80
Telegraph.....	3, 354. 37
Miscellaneous.....	60, 880. 87
	4, 055, 855. 29
Total earnings.....	4, 145, 880. 68

EXPENSES.

Conducting transportation.....	537, 075. 40
Maintenance of way.....	269, 030. 17
Motive power.....	606, 339. 37
Maintenance of equipment.....	218, 046. 02
General expenses and taxes.....	370, 141. 97
Total operating expenses.....	2, 000, 632. 93
New construction.....	49, 352. 07
New equipment.....	43, 191. 60
Total expenses.....	2, 093, 176. 60
Net earnings.....	2, 052, 704. 08
Five per cent. of net earnings under act of July 2, 1864.....	102, 635. 20

DUE THE UNITED STATES.

One-half Government transportation, as above.....	45, 012. 70
Five per cent. of net earnings.....	102, 635. 20
Total for the year.....	147, 647. 90

* Apportioned on the basis of sleeping-car mileage, being 11.23 per cent. of \$192,806.82 income from sleeping-cars.

DUE FROM THE UNION PACIFIC RAILWAY COMPANY.

On account of Union Division	\$1,023,091.77
On account of Kansas Division	147,647.90
Total	1,170,739.67

Statement of the amounts due the United States by the Union Pacific Railway Company for the year ending December 31, 1888, under the act of May 7, 1878.

UNION DIVISION.

EARNINGS.

United States:		
Passenger	\$91,224.32	
Extra baggage	173.28	
Freight	97,596.53	
Mail	487,184.55	
Express	282.61	
Telegraph	344.14	
		\$676,805.43
Commercial:		
Passenger	2,885,257.94	
Sleeping-cars*	82,755.02	
Extra baggage	47,591.25	
Freight	10,238,513.05	
Company freight	241,714.98	
Express	325,265.80	
Miscellaneous	143,664.08	
		13,964,762.12
Total earnings		14,641,567.55

EXPENSES.

Conducting transportation	2,613,511.90
Maintenance of way	1,191,741.17
Motive power	2,884,387.81
Maintenance of equipment	916,940.07
General expenses and taxes	826,851.47
Total operating expenses	8,433,432.42
Interest on first-mortgage bonds	1,633,740.00
New construction	254,791.39
New equipment†	126,276.95
Total expenses under act of May 7, 1878	10,448,240.76
Net earnings	4,193,326.79
Twenty-five per cent. of net earnings	1,048,331.70

DUE THE UNITED STATES.

One-half Government transportation, as above	\$338,402.72
Five per cent. of net earnings	209,666.34
To credit of bond and interest account	548,069.06

*Apportioned on the basis of sleeping-car mileage, being 52.88 per cent. of \$156,495.87, income from sleeping-cars.

†The total amount charged by the company as additions to rolling stock during the year amounted to \$2,162,876.67, but \$2,102,582.30 thereof, covered by trust-equipment bonds, has been disallowed, which leaves the sum of \$60,294.37 as properly chargeable under this head. The company is credited with \$71,000 for equipment trust bonds, redeemed during the year; also with \$45,762.50 interest, paid during the same period on outstanding bonds of this character; making a total credit of \$177,056.87, which has been distributed on the basis of revenue train mileage, the proportion for this division being 71.32 per cent.

One-half Government transportation, as above.....	\$338,402.71	
Cash payment under section 4, act of May 7, 1878.....	161,859.93	
		<hr/>
To credit of sinking-fund account		\$500,262.64
		<hr/>
Total for the year.....		1,048,331.70

KANSAS DIVISION—AIDED ROAD.

EARNINGS.

United States:		
Passenger.....	\$8,470.27	
Freight.....	7,234.11	
Mail.....	80,522.39	
Express.....	42.68	
Telegraph.....	31.50	
		<hr/>
		\$96,300.95
Commercial:		
Passenger.....	994,018.83	
Sleeping cars *.....	23,270.94	
Extra baggage.....	11,781.71	
Freight.....	1,844,162.45	
Company freight.....	177,093.43	
Express.....	83,883.41	
Miscellaneous.....	98,064.33	
		<hr/>
		3,232,275.10
Total earnings.....		3,328,576.05

EXPENSES.

Conducting transportation.....	586,064.11	
Maintenance of way.....	371,115.49	
Motive power.....	568,189.27	
Maintenance of cars.....	225,741.17	
General expenses and taxes.....	200,875.39	
		<hr/>
Total operating expenses.....	1,951,985.43	
New construction.....	6,842.54	
New equipment †.....	28,364.51	
		<hr/>
Total expenses under act of July 2, 1864.....		1,987,192.48
		<hr/>
Net earnings.....		1,341,383.57
		<hr/>
Five per cent. of net earnings.....		67,069.18
		<hr/>

DUE THE UNITED STATES.

One-half Government transportation, as above.....	48,150.48
Five per cent. of net earnings.....	67,069.18
	<hr/>
Total.....	115,219.66
	<hr/>

DUE FROM THE UNION PACIFIC RAILWAY COMPANY.

On account of Union Division.....	1,048,331.70
On account of Kansas Division.....	115,219.66
	<hr/>
Total for the year.....	1,163,551.36

* Apportioned on the basis of sleeping-car mileage, being 14.87 per cent. of \$156,495.87, income from sleeping cars.

† Apportioned on the basis of revenue train mileage, being 16.02 per cent. of \$177,056.87 expended for new equipment, etc. See note to statement for the Union Division.

RECAPITULATION.

	Bond and interest account.	Sinking-fund account.	Total.
Due from Union Division for the year 1886.....	\$463,918.02	\$340,174.14	\$804,092.16
Due from Kansas Division for the year 1886.....	129,914.35	.....	129,914.35
Due from Union Division for the year 1887.....	518,561.83	504,509.94	1,023,071.77
Due from Kansas Division for the year 1887.....	147,647.90	.....	147,647.90
Due from Union Division for the year 1888.....	548,069.06	500,262.64	1,048,331.70
Due from Kansas Division for the year 1888.....	115,219.66	.....	115,219.66
Total due the United States.....	1,923,350.82	1,344,946.72	3,268,297.54
CONTRA.			
By settled accounts for transportation services performed and moneys covered into the Treasury:			
Account of Union Division for the year 1886.....	\$343,203.22	\$343,203.27	\$686,406.49
Account of Kansas Division for the year 1886.....	81,943.68	.....	81,943.68
Account of branch lines for the year 1886.....	.....	340,212.36	340,212.36
Account of Union Division for the year 1887.....	234,925.48	234,925.75	469,851.23
Account of Kansas Division for the year 1887.....	89,200.43	.....	89,200.43
Account of branch lines for the year 1887.....	.....	352,704.03	352,704.03
Account of Union Division for the year 1888.....	282,823.72	282,829.61	565,653.33
Account of Kansas Division for the year 1888.....	87,760.16	.....	87,760.16
Account of branch lines for the year 1888.....	.....	350,107.83	350,107.83
	1,119,861.59	1,903,982.85	3,023,844.54
Balance due the United States in cash, payable to bond and interest account.....			244,453.00

In the recapitulation of amounts due, immediately preceding, the company is allowed credit for all accounts for transportation services rendered during the years 1886, 1887, and 1888, which have been adjusted and the moneys covered into the Treasury. In the settlement of these accounts, it is the practice of the Treasury Department to carry one-half of the amount for services rendered on the aided line to the credit of the bond and interest account, and one-half to the sinking fund, as required by section 2 of the act of May 7, 1873. In the settlement of accounts for services rendered by the non-aided lines, *the entire amount* is carried to the credit of the sinking fund. By the latter method the 5 per cent. of net earnings payable under the act of July 1, 1862, seems to be lost sight of, and the sinking fund receives a larger sum than it is entitled to be credited with.

Reference to the foregoing statement shows that there was due the bond and interest account for the years above enumerated the sum of \$1,923,350.82, and that there had been carried to its credit \$1,119,861.69, leaving \$803,489.13 as still due that account. The amount due the sinking fund for the same period was \$1,344,946.72, but there had been credited the sum of \$1,903,982.85, being \$559,036.13 in excess of the amount which should have been carried to that fund. A counter-warrant should be issued transferring the sum of \$559,036.13 from the sinking fund to the bond and interest account.

The balance of \$244,430 found to be due from the company in cash should be carried to the credit of the bond and interest account.

CENTRAL PACIFIC RAILROAD COMPANY.

The lines of this company are operated by the Southern Pacific Company under a lease dated February 17, 1885, and the modification thereof dated January 1, 1888. The lessee receives the earnings from the property operated, and agrees to operate, maintain, add to, and better the same; to pay its bonded and floating debt, except its debt

to the United States; also the sinking fund requirements for its mortgage bonds and the annual requirement to the United States under the acts of 1862 and 1864, and the Thurman act of 1878. The net profit, after such payments are made or provided for, is payable annually to the lessor company up to, but not beyond, the maximum sum of \$4,080,000; and the lessee guarantees a minimum payment of such surplus net profit to the annual amount of \$1,360,000. Any surplus over the maximum amount above alluded to is to be retained by the lessee. The lessee further agrees to comply with all acts of Congress which impose any obligation on the Central Pacific Railroad Company in its operation, maintenance, or transportation for the United States over said railroad.

The total length of road owned June 30, 1889, was 1,360.28 miles. That portion of the line extending from Ogden, Utah, to Sacramento, thence via Niles to San José, Cal., a distance of 860.66 miles, was aided by the United States with bonds and lands, and is subject to the requirements of the act of May 7, 1878. The subsidy bonds issued to aid in its construction amounted to \$27,855,680, and the interest paid thereon by the United States to \$35,148,849.01. There has been repaid by the company in transportation services and cash payments, as shown by the books of the Treasury Department, the sum of \$10,747,794.27, which makes its liability to the Government, June 30, 1889, amount to \$52,256,734.74. The excess of interest paid by the United States over all credits amounts to \$24,401,054.74.

This railroad and its appurtenances was carefully inspected by the engineer of this Bureau and found to be in excellent condition. The details of all improvements made during the year will be found in his report, printed herewith as an appendix.

The number of acres of land patented to this company to June 30, 1889, was 1,039,710.59 on account of the Central Pacific and 1,362,673.75 on account of the California and Oregon Railroad, making a total of 2,402,384.34 acres. There had been sold 2,415,669.74 acres, the total receipts from all sources amounting to \$8,364,248.50. There remained outstanding on account of time sales the sum of \$996,442.23.

The equipment consists of 245 locomotives, all of which are equipped with Westinghouse brakes; 18 sleeping, 172 first-class, 72 emigrant, 16 mail, 44 baggage, 9 express, and 7 officers' cars; making a total of 338 cars in the passenger department. In the freight service there are 2,636 box, 1,826 flat, 104 caboose cars; making a total of 4,566 cars in this department. The entire rolling stock is equipped with Westinghouse brakes and all of the passenger and 94 box-cars with Miller couplers and platforms.

During the year the company laid 6,618.70 tons of steel rails at a cost of \$229,981.54, and 536,160 cross-ties at a cost of \$294,178.10, all of which was charged to operating expenses. The expenditures charged to new construction amounted to \$731,522.83. The repairs of bridges and culverts cost \$217,984.49, buildings \$199,550.74, and snow-sheds \$114,496.85.

There are ballasted with stone and gravel 684 miles of track, and 665 miles with earth. There are 840.45 miles of single line of fencing and 33.86 miles of snow-sheds.

The following tables show the financial condition of the company, the amount found due under the acts of 1862, 1864, and 1878, and other statistics pertaining to the road:

Comparative statement of the funded debt of the Central Pacific Railroad Company, June 30, 1889 and 1888.

Character of bonds.	Term of bonds.		Rate of interest.	Amount of bonds outstanding.		Difference.		Lien.
	Years.	Date of maturity.		June 30, 1889.	June 30, 1888.	Increase or decrease.	Amount.	
Central Pacific Railroad Company.								
First mortgage, series A.....	30	1895	Per cent. 6	\$2,995,000	\$2,995,000	.....	.....	Road and franchise, Sacramento to State line.
First mortgage, series B.....	30	1896	6	1,000,000	1,000,000	.....	.....	Do.
First mortgage, series C.....	30	1896	6	1,000,000	1,000,000	.....	.....	Do.
First mortgage, series D.....	30	1896	6	1,383,000	1,383,000	.....	.....	Do.
First mortgage, series E.....	30	1897	6	3,997,000	3,997,000	.....	.....	Road and franchise, California State line to 5 miles west of Ogden.
First mortgage, series F.....	30	1898	6	3,999,000	3,999,000	.....	.....	Do.
First mortgage, series G.....	30	1898	6	3,999,000	3,999,000	.....	.....	Do.
First mortgage, series H.....	30	1898	6	3,999,000	3,999,000	.....	.....	Do.
First mortgage, series I.....	30	1898	6	3,511,000	3,511,000	.....	.....	Do.
United States subsidy, second mortgage.....	30	1895-98	6	25,885,120	25,885,120	.....	.....	Road and franchise, Sacramento to 5 miles west of Ogden.
California State aid.....	20	1898	7	5,000	284,000	Decrease.....	\$279,000	Sacramento to State line.
First mortgage, series A (California and Oregon Division).	20	1898	6	3,000	55,000	Decrease.....	52,000	Road and franchise, Roseville Junction to Oregon State line.
First mortgage, series A, extended (California and Oregon Division).	30	1913	5	5,979,000	5,940,000	Increase.....	39,000	Do.
First mortgage, series B (California and Oregon Division).	20	1892	6	5,858,000	5,858,000	.....	.....	Do.
Land grant.....	20	1890	6	4,261,000	4,261,000	.....	.....	First mortgage, Central Pacific and California and Oregon lands.
Fifty-year bonds.....	50	1936	6	8,822,000	8,563,000	Increase.....	259,000	Lands granted by United States and all other property, except aided line.
Western Pacific Railroad Company.								
Old issue.....	30	1895	6	111,000	111,000	.....	.....	Road and franchise, Sacramento to San José.
First mortgage, series A.....	30	1899	6	1,859,000	1,859,000	.....	.....	Do.
First mortgage, series B.....	30	1890	6	765,000	765,000	.....	.....	Road and franchise, Niles to San José.
United States subsidy, second mortgage.....	30	1895-99	6	1,970,560	1,970,560	.....	.....	Road and franchise, Sacramento to San José.
San Francisco, Oakland and Alameda Railroad Company.								
First mortgage.....	20	1890	8	133,000	133,000	.....	.....	Road and franchise.
San Joaquin Valley Railroad Company.								
First mortgage.....	30	1900	6	6,080,000	6,080,000	.....	.....	Road and franchise, Lathrop to Goshen.
Total.....				87,614,630	87,647,680	Decrease.....	33,000	

Revenues and expenditures of the Central Pacific Railroad Company for the year ending June 30, 1889.

REVENUES.

Earnings (guaranteed rental, 1888)	\$1,360,000.00
Land department (sales, etc., 1888)	268,667.12
Interest on sinking fund of company	397,004.67
Sinking-fund requirement, paid by Southern Pacific Company, 1888 ..	275,000.00
United States requirement, paid by the Southern Pacific Company, 1888	467,217.50
Total	2,767,889.29

EXPENDITURES.

Operating expenses	(*)
Interest on first mortgage bonds	(*)
Interest on other funded debt	(*)
Interest on other debt	(*)
Sinking-fund requirements—company	\$672,004.67
New construction	(+)
New equipment	(+)
Dividends Nos. 19 and 20, August 1, 1888, and February 1, 1889	1,345,510.00
Expenses of the land department	(*)
United States sinking-fund requirement	467,217.50
Land receipts paid to trustees of land mortgages	268,667.12
Expenses for operations prior to lease	129.51
Total	2,766,350.29
Surplus	1,539.00

* Payable by lessee. † Payable by lessee and charged in income account.

Comparative statement of the financial condition of the Central Pacific Railroad Company June 30, 1889 and 1888.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
LIABILITIES.				
First-mortgage bonds.....	\$27,853,000.00	\$27,853,000.00		
United States subsidy bonds.....	27,855,680.00	27,855,680.00		
Interest on same paid by United States	35,148,849.01	33,477,508.21	Increase.	\$1,671,340.80
Other funded debt.....	31,906,000.00	31,939,000.00	Decrease.	33,000.00
Dividends unpaid.....	64,592.00	64,732.00	Decrease.	140.00
Bills payable.....		2,500.00	Decrease.	2,500.00
Accounts payable, pay-rolls and vouchers.....	263,355.69	262,602.76	Increase.	752.93
Trustees' land-grant mortgage.....	2,106,940.04	1,724,471.79	Increase.	382,468.25
Sinking-funds uninvested.....	97,748.36	86,834.92	Increase.	10,913.44
Total debt.....	125,296,165.10	123,266,329.68	Increase.	2,029,835.42
Capital stock.....	68,000,000.00	68,000,000.00		
Total stock and debt.....	193,296,165.10	191,266,329.68	Increase.	2,029,835.42
ASSETS.				
Cost of road, fixtures, and equipments.....	\$167,655,169.16	\$167,400,605.41	Increase.	\$254,563.75
Land contracts, land cash, etc.....	996,442.23	1,181,164.88	Decrease.	81,722.65
Cash on hand.....	128,749.38	276,706.84	Decrease.	147,957.46
Company's stock owned by company.....	724,500.00	724,500.00		
Other stocks and bonds owned by company.....	832,615.09	1,116,845.50	Decrease.	284,230.50

*Comparative statement of the financial condition of the Central Pacific Railroad Company
June 30, 1889 and 1888—Continued.*

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
ASSETS—continued.				
Miscellaneous investments	\$19,692.18	\$19,759.38	Decrease.	\$67.20
Sinking-fund in hands of trustees	8,640,597.46	7,878,124.54	Increase.	762,472.92
Collateral land trust	1,500,000.00	1,500,000.00		
Bills and accounts receivable	1,182,495.34	352,770.31	Increase.	829,725.03
United States transportation and sink- ing-fund accounts	10,508,939.68	10,041,722.18	Increase.	467,217.50
Due from the United States	1,068,161.67	1,068,161.67		
Water front in San Francisco, Oakland, and Sacramento	7,750,000.00	7,750,000.00		
Farming lands unsold, estimated value*	21,750,000.00	22,250,000.00	Decrease.	500,000.00
Total assets	22,275,362.19	221,460,360.80	Increase.	1,297,001.39
Surplus	29,461,197.09	30,194,031.12	Decrease.	732,834.03

* The company explains in its report that "on account of conflicting and overlapping grants, adverse claims, desert lands, and lands liable to be lost in consequence of failure to pay costs of survey, selection, and taxes, etc., the quantity of these lands to accrue, and their value, can not be closely estimated." It is very improbable that the above estimate is even an approximation.

Comparative statement of the earnings and expenses of the Central Pacific Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$4,982,136.31	\$4,722,289.77	Increase	\$259,846.54
Freight	9,660,454.81	9,393,507.09	Increase	266,947.72
Mail	451,757.56	405,025.89	Increase	46,731.67
Express	199,038.13	194,607.48	Increase	4,430.65
Miscellaneous	403,214.14	321,762.42	Increase	81,451.72
Total	15,696,600.95	15,037,192.65	Increase	659,408.30
EXPENSES.				
Maintenance of way and structures	2,079,496.91	1,468,680.52	Increase	610,816.39
Maintenance of equipment	1,410,309.92	1,071,569.48	Increase	338,740.44
Conducting transportation	5,400,391.78	4,920,625.83	Increase	479,765.95
General expenses and taxes	1,471,200.30	1,557,337.02	Decrease	86,136.72
Total	10,361,398.91	9,018,212.85	Increase	1,343,186.06
Net earnings	5,335,202.04	6,018,979.80	Decrease	683,777.76
Average miles operated	1,360.40	1,360.35	Increase	05
Earnings per mile	\$11,538.22	\$11,053.91	Increase	\$484.31
Expenses per mile	7,616.43	6,629.33	Increase	987.10
Net earnings per mile	3,921.79	4,424.58	Decrease	502.79
Percentage of expenses to earnings	66.01	59.96	Increase	6.05

Statement of amount due from the Central Pacific Railroad Company for the year ending December 31, 1888.

EARNINGS.	
United States:	
Passenger.....	\$17,302.08
Freight.....	22,012.89
Mail.....	350,684.98
	<hr/>
	\$389,999.95
Commercial:	
Passenger.....	2,475,454.58
Extra baggage.....	31,936.01
Sleeping-cars.....	80,056.31
Freight.....	5,330,983.69
Company freight.....	592,958.15
Express.....	106,943.82
Telegraph.....	30,120.00
Miscellaneous.....	139,814.06
	<hr/>
	8,788,266.62
Total earnings.....	<hr/>
	9,178,266.57

EXPENSES.	
Maintenance of way and structures.....	947,966.97
Maintenance of equipment.....	817,245.00
Conducting transportation.....	3,078,593.88
General expenses and taxes.....	774,236.24
New construction.....	357,499.09
Interest on first-mortgage bonds.....	1,671,180.00
	<hr/>
	7,646,721.18
Less credits for equipment sold, etc.....	12,805.69
	<hr/>
	7,633,915.49
Net earnings.....	<hr/>
	1,544,351.08
Twenty-five per cent. of net earnings under act of May 7, 1878.....	<hr/>
	388,087.77

DUE THE UNITED STATES.	
One-half transportation as above.....	194,999.97
Five per cent. of net earnings.....	77,217.55
	<hr/>
Total to credit interest account.....	272,217.52
One-half transportation as above.....	194,999.98
	<hr/>
Total to credit sinking-fund account.....	194,999.98
	<hr/>
Total for the year.....	467,217.50

The company claims, in its general balance-sheet, credit for services rendered the Government amounting to \$11,577,101.35, but the following statement compiled from reports furnished by the Treasury Department of settled accounts and moneys paid into the Treasury to June 30, 1889, shows a difference of \$829,307.08, as follows:

Transportation applied to interest account.....	\$5,873,758.45
Cash payments applied to interest account.....	658,283.26
	<hr/>
Total interest account.....	\$6,532,041.71
Transportation applied to sinking-fund account.....	2,924,073.36
Cash payments applied to sinking-fund account.....	633,992.48
Accumulated interest on sinking-fund investments.....	657,686.72
	<hr/>
Total sinking-fund account.....	4,215,752.56
	<hr/>
Total credits to June 30, 1889.....	10,747,794.27
Amount of credits claimed by company.....	11,577,101.35
	<hr/>
Difference.....	829,307.08

CONDITION OF SINKING FUNDS.

The sinking funds of the Union and Central Pacific Companies held by the Secretary of the Treasury June 30, 1889, amounted to \$13,514,604.91, the Union Pacific having to its credit \$9,298,852.35 and the Central Pacific \$4,215,752.56.

The premium paid on bonds for the sinking fund of the Union Pacific to June 30, 1889, amounted to \$1,752,726.64, and the interest received from investments to \$1,216,573.48. For the Central Pacific the premium amounted to \$998,986.42 and the interest on investments to \$657,686.72.

The Secretary of the Treasury has made the following investments during the period from the creation of this fund in 1878 to June 30, 1889:

Character of bonds.	Union Pacific.	Central Pacific.	Total.
Funded loan of 1881, 5 per cent., extended at 3 per cent.....	\$256,450.00	\$736,700.00	\$993,150.00
Funded loan of July 12, 1882, at 3 per cent.....	1,620,000.00	1,220,000.00	2,840,000.00
Funded loan of 1907, 4 per cent.....	4,478,650.00	199,100.00	4,677,750.00
Currency sixes, U.S. subsidy bonds.....	1,043,000.00	2,548,000.00	3,591,000.00
First mortgage bonds, Union and Central Pacific Companies.....	2,018,000.00	666,000.00	2,684,000.00
Principal.....	9,416,100.00	5,369,800.00	14,785,900.00
Less bonds redeemed and sold.....	1,876,450.00	2,155,800.00	4,032,250.00
Present principal.....	7,539,650.00	3,214,000.00	10,753,650.00
Premium paid.....	1,752,726.64	998,986.42	2,751,713.06
Total cost.....	9,292,376.64	4,212,986.42	13,505,363.06

Since December 31, 1887, the following investments have been made in the first-mortgage bonds of the Union and Central Pacific Companies: For the Union Pacific, \$1,266,000, at a premium of \$209,952.50, and for the Central Pacific, \$471,000, at a premium of \$76,080.

There remained in the Treasury of the United States *uninvested* June 30, 1889, the following amounts:

Credit of the Union Pacific.....	\$6,475.71
Credit of the Central Pacific.....	2,766.14
Total.....	9,241.85

SIOUX CITY AND PACIFIC RAILROAD COMPANY.

This road is still operated by the Chicago and Northwestern Railway Company, and extends from Sioux City, Iowa, to Fremont, Nebr., a distance of 107.42 miles. It received bonds from the United States amounting to \$1,628,320, to aid in the construction of 104.58 miles, that portion of the line between Missouri Valley and California Junction, 5.84 miles not being subsidized. The interest paid by the United States amounts to \$2,050,492.70, and there had been retained by the Treasury Department, on account of transportation services rendered, the sum of \$153,509.69, leaving an aggregate amount due the Government June 30, 1889, of \$3,525,303. The excess of interest paid by the United States over all credits amounted to \$1,896,983.

The road-bed, track, buildings, and equipment were inspected by the engineer and found to be in good condition. Many improvements were

made during the year, the details of which will be found in the engineer's report.

The equipment consists of 12 locomotives, 5 of which are equipped with Westinghouse brakes; 14 passenger cars, all of which have Westinghouse brakes and Miller platforms; 90 box, 20 stock, 46 flat, 12 ear-boose, and 4 miscellaneous cars.

The company received from the Government a grant of 41,398.23 acres of land, all of which was sold April 15, 1875, to the Missouri Valley Land Company for \$200,000.

The following statements show the financial condition of the company June 30, 1889:

Financial condition of the Sioux City and Pacific Railroad Company, June 30, 1889.

LIABILITIES.

First-mortgage bonds	\$1,628,000.00
Interest on first-mortgage bonds	74,610.00
Other funded debt	1,628,320.00
Interest on preferred stock, accrued, not due	2,957.51
Interest on other funded debt, accrued, not due	2,050,492.69
Pay-rolls and vouchers	70,301.99
Total debt	5,454,6-2.19
Capital stock	2,065,400.00
Total stock and debt	7,523,082.19

ASSETS.

Road, fixtures, and equipment	5,597,466.78
Fuel, material, and stores on hand	110,541.74
Cash on hand	83,620.90
Due from the United States	201,516.99
Accounts receivable	61,829.17
Due from other companies on account of traffic	23,734.66
Total assets	6,078,710.24
Deficit	1,444,371.95

Statement of revenues and expenditures for year ending June 30, 1889.

REVENUES.

Earnings	\$573,957.66
Profit and loss	3,063.96
Total	577,021.62

EXPENDITURES.

Operating expenses, including rentals and taxes	347,984.66
Interest on first mortgage bonds	97,680.00
Interest on other funded debt	97,699.20
Interest on other debt	5,573.13
New construction	43,771.14
Interest on preferred stock	11,830.00
Total	604,538.13
Deficit	27,516.51

Comparative statement of the earnings and expenses of the Sioux City and Pacific Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$255,364.64	\$242,610.74	Increase	\$12,753.90
Freight	266,654.63	283,116.07	Decrease	16,461.44
Mail	23,028.12	22,803.59	Increase	224.53
Express	10,125.42	10,298.01	Decrease	172.59
Miscellaneous	18,784.62	22,447.15	Decrease	3,662.53
Total	573,957.43	581,275.56	Decrease	7,318.13
EXPENSES.				
Conducting transportation	303,823.01	343,419.09	Decrease	39,596.08
Maintenance of way				
Motive power				
Maintenance of cars				
General expenses and taxes	44,161.42	45,625.39	Decrease	1,463.97
Total	347,984.43	389,044.48	Decrease	41,060.05
Net earnings	225,973.00	192,231.08	Increase	33,741.92
Average miles operated	107.42	107.42		
Earnings per mile	\$5,343.11	\$5,411.24	Decrease	\$68.13
Expenses per mile	3,239.47	3,621.71	Decrease	382.24
Net earnings per mile	2,103.64	1,789.53	Increase	314.11
Percentage of expenses to earnings	60.62	65.93	Decrease	6.31

Statement of amount due from the Sioux City and Pacific Railroad Company for the year ending December 31, 1888.

EARNINGS.

United States:	
Passenger	\$1,385.88
Freight	820.23
Mail	21,595.22
	\$23,801.33
Commercial:	
Passenger	227,873.39
Extra baggage	4,103.86
Freight	236,363.67
Express	9,370.17
Miscellaneous	15,778.24
	493,489.33
Total earnings	517,290.66

EXPENSES.

Conducting transportation	104,040.48
Maintenance of way	97,466.29
Motive power	91,846.23
Maintenance of cars	11,094.89
General expenses and taxes	45,956.20
New construction	25,213.63
Total operating expenses	375,617.77
Net earnings	141,672.89
Five per cent. of net earnings	7,083.64

DUE THE UNITED STATES.

One-half transportation as above.....	\$11,900.67
Five per cent. of net earnings, under act of July 1, 1862	7,083.64
Total.....	<u>18,984.31</u>

CENTRAL BRANCH UNION PACIFIC RAILROAD COMPANY.

The subsidized portion of this line is operated by the Missouri Pacific Railway Company, and extends from Atchison to Waterville, Kans., a distance of 100 miles, the Government having issued bonds to aid in its construction amounting to \$1,600,000. The interest paid by the United States amounted to \$2,125,808.26, and there had been repaid by cash payments and transportation withheld the sum of \$391,045.88, making the aggregate debt to the Government June 30, 1889, amount to \$3,334,762.38. The excess of interest paid over all credits amounted to \$1,734,762.38.

The engineer inspected the road in August and found it to be in fairly good condition, the entire main line being laid with steel rails. A new union depot is now in course of construction at Atchison.

The equipment appears to be fairly kept up, and consists of 35 locomotives, 12 of which have Westinghouse air and 5 steam brakes; 23 cars in the passenger service, equipped with Westinghouse brakes and Miller platforms, and 531 cars in the freight service.

This company has received from the Government about 245,000 acres of land. During the year ending June 30, 1889, the sum of \$14,181.86 was received from the sale of lands, and there are outstanding on account of time sales the sum of \$31,173.50.

The following statements show the financial condition of the company:

Financial condition of the Central Branch Union Pacific Railroad Company, June 30, 1889.

LIABILITIES.

First-mortgage bonds.....	\$2,230,000.00
Interest on same, due and accrued.....	2,535.00
United States subsidy bonds	1,600,000.00
Interest on United States subsidy bonds.....	2,125,808.26
Dividends unpaid.....	25.00
Accounts payable.....	465,506.52
Total debt.....	<u>6,423,874.78</u>
Capital stock.....	1,000,000.00
Total stock and debt.....	<u>7,423,874.78</u>

ASSETS.

Road, fixtures, and equipments.....	4,005,445.36
Land contracts.....	31,173.50
Company's stocks and bonds owned by company.....	15,400.00
Other stocks and bonds.....	112,837.76
Accounts receivable.....	27,344.29
Government transportation withheld.....	401,647.22
Total assets.....	<u>4,593,848.13</u>
Deficit.....	<u>2,830,026.65</u>

Revenues and expenditures for year ending June 30, 1889.

REVENUES.

Earnings	\$406, 074. 37
Interest and income from miscellaneous investments	7, 382. 04
Receipts of the land department	2, 514. 10
Profit and loss	1, 840. 48
Total	417, 810. 99

EXPENDITURES.

Operating expenses and taxes	282, 673. 05
Interest on first-mortgage bonds	140, 100. 00
Losses on leased lines	269, 728. 18
New construction and new equipment	5, 381. 85
Expenses of land department	951. 22
United States requirement	14, 664. 24
Miscellaneous	6, 164. 13
Total	719, 662. 67
Deficit	301, 851. 68

Comparative statement of the earnings and expenses of the Central Branch Union Pacific Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$81, 388. 12	\$98, 745. 17	Decrease	\$17, 357. 05
Freight	296, 175. 34	337, 540. 38	Decrease	41, 365. 04
Mail	14, 401. 32	14, 401. 32		
Express	5, 276. 90	7, 166. 75	Decrease	1, 889. 85
Miscellaneous	8, 832. 69	7, 931. 58	Increase	901. 11
Total	406, 074. 37	465, 785. 20	Decrease	59, 710. 83
EXPENSES.				
Conducting transportation	82, 326. 37	116, 477. 62	Decrease	34, 151. 25
Maintenance of way	46, 307. 58	69, 438. 84	Decrease	23, 131. 26
Motive power	86, 909. 75	100, 753. 89	Decrease	13, 844. 14
Maintenance of cars	27, 384. 96	21, 343. 94	Increase	6, 041. 02
General expenses and taxes	12, 483. 20	12, 146. 24	Increase	336. 96
Total	255, 411. 86	320, 160. 53	Decrease	64, 748. 67
Net earnings	150, 662. 51	145, 624. 67	Increase	5, 037. 84
Average miles operated				
	100. 00	100. 00		
Earnings per mile	\$4, 060. 74	\$4, 657. 85	Decrease	\$597. 11
Expenses per mile	2, 554. 11	3, 201. 61	Decrease	647. 50
Net earnings per mile	1, 506. 63	1, 456. 24	Increase	50. 39
Percentage of expenses to earnings	62. 89	68. 73		

Statement of amount due from the Central Branch Union Pacific Railroad Company for the year ending December 31, 1883.

EARNINGS.

United States:		
Passenger.....	\$115. 63	
Freight.....	22. 46	
Mail.....	14, 401. 32	
		<u>\$14, 539. 41</u>
Commercial:		
Passenger.....	87, 614. 29	
Freight.....	309, 261. 93	
Express.....	5, 989. 04	
Miscellaneous.....	8, 629. 83	
		<u>411, 495. 09</u>
Total earnings.....		<u>426, 034. 50</u>

EXPENSES.

Conducting transportation.....	102, 707. 24
Maintenance of way.....	50, 073. 97
Motive power.....	90, 841. 11
Maintenance of way.....	22, 343. 67
General expenses and taxes.....	12, 177. 90
Total operating expenses.....	<u>278, 143. 89</u>
Net earnings.....	<u>147, 890. 61</u>
Five per cent. of net earnings, under act of July 1, 1862.....	<u>7, 269. 71</u>

DUE THE UNITED STATES.

One-half transportation as above.....	7, 394. 53
Five per cent. of net earnings.....	7, 269. 71
Total.....	<u>14, 664. 24</u>

Amount of bonds issued in aid of Pacific Railroads, the interest paid thereon by the United States, and the amounts repaid by the several companies to June 30, 1889.

	Union Pacific, including Kansas Pa- cific.	Central Pa- cific, includ- ing Western Pacific.	Sioux City and Pacific.	Central Branch Union Pa- cific.	Total.
Principal of bonds issued by the United States.....	\$33, 539, 512. 00	\$27, 855, 680. 00	\$1, 628, 320. 00	\$1, 600, 000. 00	\$64, 623, 512. 00
Interest paid thereon by the United States.....	43, 161, 407. 82	35, 148, 849. 01	2, 050, 492. 69	2, 125, 808. 26	82, 486, 557. 78
Total debt.....	<u>76, 700, 919. 82</u>	<u>63, 004, 529. 01</u>	<u>3, 678, 812. 69</u>	<u>3, 725, 808. 26</u>	<u>147, 110, 069. 78</u>
CREDITS.					
<i>Applied to bond and interest account.</i>					
Transportation.....	\$15, 693, 865. 43	\$5, 873, 758. 45	\$153, 509. 69	\$384, 118. 97	\$22, 105, 252. 54
Cash.....	438, 409. 58	658, 283. 26		6, 926. 91	1, 103, 619. 75
<i>Applied to sinking-fund ac- count.</i>					
Transportation.....	6, 660, 564. 41	2, 924, 073. 36			9, 584, 637. 77
Cash.....	1, 421, 714. 46	633, 992. 48			2, 055, 706. 94
Interest on sinking-fund in- vestments.....	1, 216, 573. 48	657, 686. 72			1, 874, 260. 20
Total credits.....	<u>25, 431, 127. 36</u>	<u>10, 747, 794. 27</u>	<u>153, 509. 69</u>	<u>391, 045. 88</u>	<u>36, 723, 477. 20</u>
Balance of debt.....	<u>51, 269, 792. 46</u>	<u>52, 256, 734. 74</u>	<u>3, 525, 303. 00</u>	<u>3, 334, 762. 38</u>	<u>110, 386, 592. 58</u>
Excess of interest paid by the United States over all credits.....	<u>17, 739, 280. 46</u>	<u>24, 401, 054. 74</u>	<u>1, 896, 983. 00</u>	<u>1, 734, 762. 38</u>	<u>45, 763, 080. 58</u>

ATCHISON, TOPEKA AND SANTA FÉ RAILROAD COMPANY.

The mileage reported by this company December 31, 1888, was :

	Miles.
Main line, Atchison to west line of Kansas, owned.....	470.58
Other lines operated, but not owned.....	2,553.92
Total owned and operated.....	3,024.50

The rolling stock, owned and rented, consists of 658 locomotives, 591 of which have automatic brakes; 611 passenger cars, 593 of which have Miller couplers and platforms, and 600 have the Westinghouse train brakes; 16,423 cars in freight service, 14,804 of which have Westinghouse train brakes, and 13 fruit cars have also Miller platforms and couplers; 54 cars are in road-repair service.

To December 31, 1888, there had been patented by the Government 2,934,659.68 acres of land, all of which had been sold. There had been received in cash from land sales \$11,729,318.30, and there was still outstanding on account of time sales the sum of \$498,006.60.

The last report received from this company was for the year ending December 31, 1888. The following statements show the financial condition of the road on that date. The statement of earnings and expenses is compiled from the monthly reports:

Financial condition of the Atchison, Topeka and Santa Fé Railroad Company December 31, 1889.

LIABILITIES.	
First-mortgage bonds.....	\$7,041,000.00
Interest on first-mortgage bonds, due and unpaid.....	251,007.50
Other funded debt.....	43,513,000.00
Interest on other funded debt, due and unpaid.....	50,122.50
Interest on other funded debt accrued, not due.....	533,918.75
Interest on bonds of leased roads.....	633,962.82
Dividends unpaid.....	23,699.75
Interest on bonds of other companies, guaranteed.....	13,840.00
Bills payable.....	4,605,161.43
Equipment-lease warrants.....	1,302,662.00
Pay-rolls and vouchers.....	1,733,804.58
Due other companies on account of traffic.....	214,809.64
Accounts with subscribers—account of bonds.....	4,585.00
Called bonds.....	9,900.00
Land-grant trust account.....	4,319,185.64
Total debt.....	64,250,659.61
Capital stock.....	75,000,000.00
Total stock and debt.....	139,250,659.61
ASSETS.	
Road and fixtures.....	29,752,515.75
Equipment.....	17,019,679.77
Equipment leases.....	1,370,348.27
Property in leased and auxiliary roads.....	79,388,650.55
Fuel, material, and stores on hand.....	1,424,756.21
Cash on hand.....	1,415,494.04
Stocks and bonds owned by company.....	3,845,568.30
Miscellaneous investments.....	155,368.41
Due from the United States.....	264,475.12
Sinking fund in hands of trustees.....	55,121.43
Bills and notes receivable.....	172,007.33
Accounts receivable.....	1,169,817.94
Due from other companies on account of traffic.....	427,999.17
Due from auxiliary companies on account of advances.....	9,161,401.34
Advances to the Atlantic and Pacific Railroad Company.....	3,237,894.38
Suspense accounts.....	75,701.58
Total assets.....	148,939,799.59
Surplus.....	9,689,139.98

Revenues and expenditures for the year 1888.

REVENUES.

Earnings	\$15,842,491.78
Rental of track	68,235.20
Profits on bonds of other companies	567,540.32
Dividends on stocks of other companies	25,400.00
Interest on bonds of other companies	708,984.50
Profits on miscellaneous investments	97,792.67
Interest on miscellaneous investments	819,696.24
Receipts of the land department	256,016.02
Charges to construction and equipment account, per contra	3,916,540.70
Total	22,302,697.43

EXPENDITURES.

Operating expenses	\$11,040,346.60
Interest on company's bonds	2,411,060.88
Interest on bonds of leased roads paid for rentals	1,588,641.06
Interest on bonds of other companies guaranteed	283,500.00
Discount and interest	867,823.43
Sundry contract charges	489,159.83
Losses on miscellaneous investments	12,770.62
Sinking-fund requirements, company	320,735.25
New construction	178,241.28
New equipment	3,738,299.42
Dividends Nos. 35, 36, and 37	2,625,000.00
Interest on land-grant mortgage bonds	168,805.00
Expenses of the land department	13,430.38
Miscellaneous expenses land-grant trust	1,535.00
Net land receipts credited to trustees of land mortgage	72,745.64
Total	23,820,584.39
Deficit	1,517,886.96

Comparative statement of the earnings and expenses of the Atchison, Topeka and Santa Fe Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$4,239,979.39	\$4,467,911.17	Decrease	\$227,931.78
Freight	9,731,074.76	9,089,723.98	Increase	641,350.78
Mail	430,297.38	352,335.65	Increase	77,961.73
Express	505,916.75	301,209.05	Increase	204,707.70
Miscellaneous	571,819.28	238,950.01	Increase	332,869.27
Total	15,479,087.56	14,450,129.86	Increase	1,028,957.70
EXPENSES.				
Conducting transportation	3,221,674.97	2,774,685.90	Increase	446,989.07
Maintenance of way	1,849,641.83	2,089,265.67	Decrease	239,623.84
Motive power	3,290,630.67	2,404,578.49	Increase	886,052.18
Maintenance of cars	1,203,477.74	1,085,841.18	Increase	207,636.56
General expenses and taxes	476,053.96	436,600.28	Increase	39,453.68
Total	10,131,479.17	8,781,971.52	Increase	1,349,507.65
Net earnings	5,347,608.39	5,668,158.34	Decrease	320,549.95
Average miles operated	3,025.04	2,183.96	Increase	841.08
Earnings per mile	\$5,116.98	\$6,616.48	Decrease	\$1,499.50
Expenses per mile	3,349.20	4,021.12	Decrease	671.92
Net earnings per mile	1,767.78	2,595.36	Decrease	827.58
Percentage of expenses to earnings.....	65.45	60.77	Increase	4.68

ATLANTIC AND PACIFIC RAILROAD COMPANY.

The mileage operated by this company June 30, 1889, was: Western Division, Albuquerque, N. Mex., to Mojave, Cal., 818.79 miles. The Central Division, from Seneca, Mo., to Snipulpa, Ind. T., 162.5 miles, is operated by the St. Louis and San Francisco Railway Company, making, with sidings on both divisions, the whole length of tracks owned by the Atlantic and Pacific Company, 999.61 miles. The whole of the Western Division is now laid with steel rails.

The rolling stock consists of 49 locomotives, all but one equipped with Westinghouse air-brakes; 21 cars in passenger service, all equipped with Westinghouse brakes and Miller couplers and platforms; 1,277 cars in freight service, 50 of which have Westinghouse train-brakes.

This company has received by patent from the Government 959,206.87 acres of land; the cash receipts from the sales of lands to date amount to \$932,815.94, and there are outstanding on account of time sales, \$28,005.41.

Financial condition of the Atlantic and Pacific Railroad Company June 30, 1889.

LIABILITIES.

First-mortgage bonds	\$18,793,905.00
Interest on same, due and accrued	360,250.00
Interest on same, accrued, not due	11,895.00
Funded debt, other than above	20,219,629.00
Interest on same, due and unpaid	300.00
Interest on same, and rental accrued, not due	221,066.50
Bills payable	7,535,726.58
Accounts payable	102,793.95
Pay-rolls and vouchers	600,605.25
Total debt.....	47,846,171.28
Capital stock.....	79,760,300.00
Total stock and debt.....	127,606,471.28

ASSETS.

Road, fixtures, and equipment.....	119,468,991.72
Fuel, material, and stores on hand	185,694.90
Cash on hand	413,242.14
Bills receivable	168,876.17
Accounts receivable	267,955.92
Due from other companies (traffic, etc.).....	175,702.25
Due from United States, unsettled accounts on aided road	40,507.98
Suspense accounts	150,565.79
Total assets.....	120,871,536.87
Deficit.....	6,734,934.41

Revenues and expenditures for the year ending June 30, 1889.

REVENUES.

Earnings	\$3,091,593.07
Interest on bonds of other companies	1,366.66
Interest on miscellaneous investments.....	1,288.51
Receipts of the land department.....	33,335.47
Bonds issued.....	5,600,000.00
Bonds sold.....	18,000.00
Total.....	8,745,583.71

EXPENDITURES.

Operating expenses	\$3,151,856.97
Interest on first-mortgage bonds	772,846.66
Interest on other funded debt	167,700.00
Interest on other debt	964,700.99
Rentals	436,266.00
Losses on bonds of other companies	2,000.00
New equipment	1,944,520.11
Decrease in liabilities	1,409,940.12
Expenses of the land department	41,489.87
Total	8,891,320.72
Deficit	145,737.01

Comparative statement of the earnings and expenses of the Atlantic and Pacific Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$809,324.87	\$1,048,016.30	Decrease	\$238,691.43
Freight	1,914,856.62	1,405,004.47	Increase	539,855.15
Mail	85,958.10	83,115.00	Increase	2,843.10
Express	169,661.94	49,324.05	Increase	120,337.89
Miscellaneous	9,289.73	7,823.04	Increase	1,466.69
Total	3,019,094.26	2,593,282.86	Increase	425,811.40
EXPENSES.				
Conducting transportation	1,337,585.65	1,385,563.17	Decrease	47,977.52
Maintenance of way	1,060,999.06	1,003,012.85	Increase	57,986.21
Motive power	191,323.49	267,481.17	Decrease	76,157.68
Maintenance of cars	159,927.95	183,758.08	Decrease	23,830.13
General expenses and taxes	93,148.76	79,973.01	Increase	19,496.75
Total	2,840,305.91	2,910,788.28	Decrease	70,482.37
Deficit		317,505.42		
Net earnings	178,788.35		Increase	496,293.77
Average miles operated	815.00	815.00		
Earnings per mile	\$3,704.40	\$3,181.94	Increase	\$522.46
Expenses per mile	3,485.03	3,571.52	Decrease	86.49
Deficit per mile		389.58		
Net earnings per mile	219.37		Increase	608.95
Percentage of expenses to earnings	94.07	112.21	Decrease	18.14

CHICAGO, BURLINGTON AND QUINCY RAILROAD COMPANY.

The number of miles owned and leased by the company December 31, 1888, was 4,757, and it also leased and operated jointly with other companies 160 miles additional, making a total of 4,917 miles operated. The increase during the year amounted to 223.9 miles.

The number of miles of steel rails in track east of the Missouri River was 2,014, and there were 2,290 miles of steel rails in tracks west of the river, 322.75 of which were laid during the year. The sum of \$4,223,822.14 was expended during the year on account of construction, and \$1,069,218.60 for new equipment.

At the close of the year the rolling stock comprised 689 locomotives, 354 passenger and combination, 134 baggage, mail, and express, 7 din-

ing, 11 officers and pay, 352 way, 15 boarding, 8 wrecking, 20,130 box, freight, and cattle, 5,599 platform and coal, 5 pile-drivers, 1,429 hand, and 1,009 rubble and iron cars, making a total of 29,053 cars of all classes.

There have been certified or patented to this company 2,762,224.85 acres of land. The company reports the net receipts from the sale of lands during the year at \$541,767.73. There remains outstanding on account of time sales the sum of \$967,818.26, and 79,300 acres estimated to be worth \$321,500, are owned by the company.

Financial condition of the Chicago, Burlington and Quincy Railroad, June 30, 1889.

LIABILITIES.

Funded debt.....	\$97,705,267.86
Contingent liabilities for branch roads.....	6,366,780.84
Unpaid accounts, vouchers, and pay-rolls.....	3,754,714.86
Profit and loss.....	6,504,461.76
Renewal fund.....	9,000,000.00
Income account.....	9,279,141.57
Sinking funds.....	15,229,724.70
Total debt.....	147,840,031.59
Capital stock.....	76,394,505.00
Total stock and debt.....	224,234,536.59

ASSETS.

Road and equipment.....	177,371,226.09
Investments in branch road securities.....	25,690,688.08
Sundry investments.....	1,689,777.12
Materials on hand.....	2,497,281.94
Sinking funds in hands of trustees.....	11,979,993.45
Sundry available securities.....	758,500.00
Sundry accounts, bills receivable, and securities.....	2,906,502.91
Cash in treasury.....	1,340,567.60
Total assets.....	224,234,536.59

CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

The mileage of this company is 2,601.93, with 1,648.45 miles of proprietary roads, making a total of 4,250.38 miles owned and operated at the end of the year. In addition to this there are 106.11 miles of double track and 846.62 miles of sidings, making a total of 5,203.11 miles of track in the system, of which 3,747.34 are laid with steel rails and 1,455.77 miles with American iron. The expenditures during the year for construction amounted to \$1,867,101.27, and for new equipment to \$2,143,415.04.

The equipment consists of 786 locomotives equipped with Westinghouse brakes, 11 parlor, 9 hotel, 8 officers, 300 first-class and 28 second-class passenger, 26 mail, 112 baggage and express and 50 combination, making a total of 544 cars in the passenger service, all of which are equipped with Westinghouse brakes and Miller platforms. In the freight service there are 14,393 box, 1,914 stock, 1,950 coal, 2,197 flat, 4,515 iron-ore, 28 milk, 142 refrigerator, and 141 caboose cars, making a total of 25,590 cars in this department. There are 154 cars used in road-repair service.

The total number of acres of land acquired by patent from the United States was 2,956,818.12, of which 1,725,244.99 had been sold and conveyed by deed, and 261,037.14 were under contract, leaving 970,535.99 still owned by the company. The total cash receipts from all sales to December 31, 1888, amounted to \$5,456,248.54, and there remained out-

standing on account of time sales the sum of \$812,578.20. The average price per acre for sales made during the year was \$4.30, while the general average for all sales was \$2.55 per acre.

The last report received from this company was that for the year ending December 31, 1888.

Financial condition of the Chicago and Northwestern Railway Company December 31, 1888.

LIABILITIES.

First-mortgage bonds	\$79,015,500.00
Interest on first-mortgage bonds (unpresented coupons)	129,735.50
Interest on first-mortgage bonds, accrued not due	1,212,239.79
Other funded debt	26,105,000.00
Interest on other funded debt, due and unpaid	64,382.52
Interest on other funded debt, accrued not due	187,279.13
Dividends unpaid	45,575.00
Pay-rolls and vouchers	1,469,452.91
Due other companies on account of traffic	182,893.96
Fremont, Elkhorn and Missouri Valley Railroad Company	1,078,855.22
Accounts payable	100,255.07
Land notes due in 1891	125,000.00
Sinking funds paid	4,522,400.00
Total debt	114,238,569.10
Capital stock, including stock of proprietary companies	74,872,320.53
Total stock and debt	189,110,889.63

ASSETS.

Road and fixtures	134,145,058.94
Equipment	27,035,155.63
Land contracts, land cash, etc.	276,000.00
Fuel, material, and stores on hand	2,205,192.05
Cash on hand	2,709,244.47
Stocks of proprietary companies owned by company	242,750.00
Other stocks and bonds owned by company	23,415,392.01
Due from the United States	213,318.67
Sinking fund in hands of trustees	4,522,400.00
Bills receivable	76,114.49
Accounts receivable	1,537,192.03
Total assets	196,377,818.29
Surplus	7,266,928.66

Revenues and expenditures for the year 1888.

REVENUES.

Earnings	\$25,832,974.68
Dividends on stocks of other companies	323,633.00
Interest on bonds of other companies	403,397.12
Interest on miscellaneous investments	110,194.25
Receipts of the land department	517,521.13
Total	27,187,720.18

EXPENDITURES.

Operating expenses	17,152,520.45
Interest on first-mortgage bonds	4,654,004.46
Interest on other funded debt	1,547,595.00
Sinking fund requirement-company	58,000.00
New construction	1,867,101.27
New equipment	2,143,415.04
Dividends 56, 57, 58 and 59 preferred, and 28 and 29 common	3,444,504.00
Expenses of the land department	133,033.26
Total	31,000,173.48
Deficit	3,812,453.30

CHICAGO, ROCK ISLAND AND PACIFIC RAILWAY COMPANY.

In the company's printed annual report to the stockholders, dated April 1, 1889, it is stated that the total length of lines operated was as follows:

	Miles.
Main line, Chicago, Ill., to Council Bluffs, Iowa, owned	499.2
Branches owned	686.6
Leased lines	406.9
Lines of the Chicago, Kansas and Nebraska Railway	1,664.4
Total operated	3,257.1

The rolling stock comprised 381 locomotives, 24 sleeping, 162 passenger, 52 baggage, mail and express, 9 postal, 8 dining, and 3 business cars, making a total of 258 cars in the passenger service. In the freight service there were 5,044 box, 1,257 stock, 1,949 platform and coal, and 305 caboose and other cars, making a total of 8,555 cars. There were also 817 cars used in road-repair service.

The General Land Office reports that this company has received by patent from the Government 607,461.68 acres of land.

In the company's annual report to the stockholders it is also stated that during the year 4,937.36 acres of land were sold for \$53,676.69, making an average price received of about \$10.87 per acre. The unpaid bills receivable at the close of the year amounted to \$272,599.80 and the interest collected to \$24,083.41. The number of acres remaining unsold, and to which the title is undisputed, was 3,471.85, besides considerable unsold land, in lots, in the town of Audubon.

No reports, except monthly statements of earnings and expenses, have been received from this company for several years.

Comparative statement of the earnings and expenses of the Chicago, Rock Island and Pacific Railway Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$3,668,566.33	\$3,547,548.74	Increase	\$121,017.56
Freight	8,773,828.38	8,975,020.10	Decrease	201,191.72
Mail	251,113.52	219,856.15	Increase	31,257.37
Express	250,524.27	186,727.38	Increase	63,796.89
Miscellaneous	56,648.32	849,817.86	Decrease	288,169.54
Total	13,505,680.82	13,778,970.23	Decrease	273,289.41
EXPENSES.				
Conducting transportation	4,206,122.87	4,042,001.72	Increase	164,121.15
Maintenance of way	1,892,119.61	1,694,437.81	Increase	197,681.80
Motive power	542,728.75	448,823.02	Increase	93,905.73
Maintenance of cars	1,461,909.88	1,535,538.54	Decrease	73,538.66
General expenses and taxes	1,494,186.05	1,310,744.06	Increase	183,441.99
Total	9,597,157.16	9,031,545.15	Increase	565,612.01
Net earnings	3,908,523.66	4,747,425.08	Decrease	838,901.42
Average miles operated	1,976.13	1,527.70	Increase . . .	448.43
Earnings per mile	\$6,834.40	\$9,019.42	Decrease	\$2,185.02
Expenses per mile	4,856.54	5,911.86	Decrease	1,055.32
Net earnings per mile	1,977.86	3,107.56	Decrease	1,129.70
Percentage of expenses to earnings.....	71.06	65.55	Increase	5.51

DUBUQUE AND SIOUX CITY RAILROAD COMPANY.

This road extends from Dubuque to Iowa Falls, Iowa, a distance of 142.74 miles. A controlling interest was acquired by the Illinois Central Railroad Company in October, 1888, and it was subsequently consolidated with the Cedar Rapids and Chicago, the Iowa Falls and Sioux City, and the Cherokee and Dakota Railroad Companies.

The report from this company is very meager, and does not contain any information in respect to its financial condition. The records of the General Land Office show that 1,155,956.54 acres of land have been patented to aid in the construction of a line between Dubuque and Sioux City, but no report is made as to the disposition of these lands and the amount realized from the sale thereof.

During the year ending June 30, 1889, the company expended in betterments to the railway the sum of \$116,507.63, and for new equipment \$291,000.

Statement of earnings and expenses of the Dubuque and Sioux City Railroad for the year ending June 30, 1889.

EARNINGS.

Passenger	\$426,622.30
Freight	1,055,033.95
Mail	39,532.28
Express	25,432.57
Miscellaneous	35,756.25
Total.....	<u>1,582,377.35</u>

EXPENSES.

Maintenance of way and structures.....	243,965.19
Maintenance of equipment.....	159,818.11
Conducting transportation.....	519,169.69
General expenses and taxes.....	188,878.61
Total.....	<u>1,111,831.60</u>
Surplus	<u>470,545.75</u>

HANNIBAL AND ST. JOSEPH RAILROAD COMPANY.

The main line of this company extends from Hannibal, Mo., to St. Joseph, Mo., a distance of 206.41 miles. It also operates 88.83 miles of branch lines, making a total of 295.24 miles operated. A controlling interest in this road is owned by the Chicago, Burlington and Quincy Railroad Company.

The rolling-stock consists of 80 locomotives, 36 passenger, 14 baggage, mail, and express, 895 box, 169 stock, 63 platform, 477 coal, 39 caboose, and 161 other cars, making a total of 1,904 cars of all descriptions.

There have been certified or patented by the Government 603,184.34 acres of land, but no report is made of the disposition of these lands. As the general balance-sheet of the company takes up as an asset the sum of \$2,154,669.87 on account of the land department, it is therefore probable that nearly all of it has been sold.

The last report received from this company was that for the year ending December 31, 1888.

Financial condition of the Hannibal and St. Joseph Railroad Company, December 31, 1888.

LIABILITIES.

Funded debt.....	\$8,279,000.00
Accounts payable.....	592,575.44
Total debt.....	8,871,575.44
Capital stock.....	14,251,724.00
Total stock and debt.....	23,123,299.44

ASSETS.

Road and fixtures.....	17,783,740.59
Equipment.....	3,436,965.10
Farmers' Loan and Trust Company.....	279,000.00
Investments.....	673,302.79
Sundry advances.....	120.00
Accounts and bills receivable.....	408,924.07
Accounts of doubtful value.....	15,057.78
Balance of cash accounts.....	167,699.97
Land department.....	2,154,669.87
Profit and loss.....	570,254.17
Material on hand.....	183,107.07
Total assets.....	25,672,841.41
Surplus.....	2,549,541.97

Revenues and expenditures for the year 1888.

REVENUES.

Earnings.....	\$2,370,586.13
Interest and exchange.....	37,180.12
Total.....	2,407,766.25

EXPENDITURES.

Operating expenses.....	1,871,525.62
Coupon interest.....	528,955.28
Taxes.....	47,376.31
Rent Quincy bridge track.....	6,000.00
Total.....	2,453,857.21
Deficit.....	46,090.96

LITTLE ROCK AND FORT SMITH RAILWAY COMPANY.

This road was organized under a special act of the legislature of the State of Arkansas, approved January 22, 1855, as the "Little Rock and Fort Smith Railroad Company," but being sold on the 6th day of November, 1874, under a decree of foreclosure entered against it in the United States circuit court for the eastern district of Arkansas, it was reorganized by the purchasers at said sale under the name of "The Little Rock and Fort Smith Railway Company." The road was completed in 1876, and is 170 miles in length, as follows:

	Miles.
Main line, from Argenta, Ark., to Fort Smith.....	165
Branch lines.....	5

It has 16 miles of sidings; 78.49 miles are laid with steel rails, and 91.51 with iron; white oak is used for cross-ties, averaging 2,828 to the mile.

The rolling-stock consists of 16 locomotives, 8 of which are equipped with Westinghouse brakes; 13 passenger cars, all fitted with Westinghouse brakes and Miller platforms and couplers; 399 freight cars and 55 miscellaneous and road-repair cars.

This company has received from the Government 1,057,762.79 acres of land, and has sold or otherwise disposed of 503,738.43 acres. It has received from all sales to date the sum of \$1,499,325.69, and there are outstanding on account of time sales \$393,271.62.

Financial condition of the Little Rock and Fort Smith Railway Company June 30, 1889.

LIABILITIES.

Funded debt.....	\$2,779,212.25
Interest on same, due and unpaid.....	3,550.44
Interest on same, accrued, not due.....	81,987.50
Accounts payable.....	162,888.41
Total debt.....	3,027,638.60
Capital stock.....	4,506,308.58
Total stock and debt.....	7,532,947.18

ASSETS.

Road, fixtures, and equipment.....	7,690,061.56
Real estate, other than road.....	913.82
Cash on hand.....	85,780.09
Stocks and bonds.....	130,380.27
Accounts receivable.....	432,355.33
Total assets.....	8,339,491.07
Surplus.....	806,543.89

Revenues and expenditures for the year ending June 30, 1889.

REVENUES.

Earnings.....	\$773,817.89
Interest and exchange.....	440.55
Premium and discount.....	1,390.49
Sundry amounts.....	35,410.47
Total.....	811,059.40

EXPENDITURES.

Operating expenses (including rentals and taxes).....	698,454.37
Interest on funded debt.....	163,975.00
Sundry amounts.....	55,721.91
Retained by United States (account of land grants).....	631.61
Total.....	918,782.89
Deficit.....	107,723.49

LITTLE ROCK AND MEMPHIS RAILROAD COMPANY.

At the date of the last report of this Bureau the Memphis and Little Rock Railroad Company was being operated by three trustees, but since that time the company has been reorganized and the title changed to Little Rock and Memphis Railroad Company.

The road extends from Memphis, Tenn., to Argenta, Ark. (opposite Little Rock), a distance of 135 miles. There are 18 miles of sidings, and 50 miles of the road are laid with steel rails.

The equipment consists of 16 locomotives, 13 passenger, 6 baggage and mail, and 328 freight cars. The company also owns 1 transfer boat, 1 wharf-boat with steam-elevator, and 1 steam-shovel.

The company reports that during the year ending June 30, 1889, there were sold 2,679.89 acres of land for \$26,025.33, and that there are outstanding, on account of time sales, the sum of \$10,429.15. The company still owns 53,202.74 acres of land.

The following statements show the financial condition of the road June 30, 1889:

Financial condition of the Little Rock and Memphis Railroad Company June 30, 1889.

LIABILITIES.

First-mortgage bonds	\$3, 250, 000. 00
Accounts payable	18, 782. 33
Pay-rolls and vouchers	23, 291. 83
Due other companies on account of traffic	3, 098. 12
Land department	28, 857. 12
Total debt.....	3, 324, 029. 40
Capital stock	3, 250, 000. 00
Total stock and debt.....	6, 574, 029. 40

ASSETS.

Road, fixtures and equipment	6, 427, 734. 07
Land contracts, land cash, etc.	10, 429. 15
Fuel, material and stores on hand	31, 114. 25
Cash on hand	91, 791. 72
Accounts receivable	74, 225. 35
Total assets.....	6, 635, 294. 54
Surplus.....	61, 265. 14

Revenues and expenditures for year ending June 30, 1889.

REVENUES.

Earnings.....	\$624, 260. 70
Receipts of the land department.....	26, 025. 33
Total.....	650, 286. 03

EXPENDITURES.

Operating expenses.....	484, 001. 46
Expenses of the land department.....	2, 679. 89
Total.....	486, 681. 35
Surplus	163, 604. 68

Comparative statement of the earnings and expenses of the Little Rock and Memphis Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$278,266.00	\$356,605.19	Decrease	\$78,339.19
Freight	313,884.57	424,984.04	Decrease	111,099.47
Mail	15,552.68	15,515.16	Increase	37.52
Express	19,966.97	19,954.82	Increase	12.15
Miscellaneous (deduction balance car service)	3,409.52	8,795.39	Decrease	5,385.87
Total	624,260.70	808,263.82	Decrease	184,003.12
EXPENSES.				
Maintenance of way and structures ...	144,386.99	266,075.03	Decrease	121,688.04
Maintenance of equipment	42,114.49	57,624.49	Decrease	15,510.00
Conducting transportation	203,812.21	268,797.91	Decrease	64,985.70
General expenses and taxes	75,346.09	76,359.36	Decrease	1,013.27
Total	465,659.78	668,856.79	Decrease	203,197.01
Net earnings	158,600.92	139,407.03	Increase	19,193.89
Average miles operated	133.00	133.00		
Earnings per mile	\$4,693.69	\$6,077.17	Decrease	\$1,383.48
Expenses per mile	3,501.20	5,029.00	Decrease	1,527.80
Net earnings per mile	1,192.49	1,048.17	Increase	144.32
Percentage of expenses to earnings ...	74.59	82.75	Decrease	8.16

MISSOURI, KANSAS AND TEXAS RAILWAY COMPANY.

The mileage owned and operated December 31, 1888, was :

	Miles.
Hannibal, Mo., to Denison, Tex., main line	574.7
Branch lines	966.6
Operated jointly with Texas and Pacific Railway	71.0
Total operated	1,612.3

The line from Holden, Mo., to Paola, Kans., leased to the Missouri Pacific Railway, is also owned by this company, making the total mileage owned 1,594.9 miles. There are 1,204.9 miles laid with steel rails of 52 to 63 pounds per yard, and the remainder of the road is laid with iron rails 50 to 56 pounds per yard. The ties are of oak, laid about 3,000 to the mile. The length of track ballasted with stone, gravel, and cinder is 256.6 miles.

The equipment consists of 177 locomotives, 49 equipped with American steam-brakes and 53 with Westinghouse brakes; 135 cars in passenger service, all except 4 having Westinghouse train brakes and Miller platforms and couplers; 5,364 cars in freight service, and 59 cars used in road-repair service.

As this road was placed in the hands of receivers November 1, 1888, under an order of the circuit court of the United States for the district of Kansas, and as the receivers have not rendered a report to this office for the year ending June 30, 1889, the usual financial statements can not be furnished.

The following statement of earnings and expenses is compiled from the monthly reports furnished this Bureau:

Comparative statement of the earnings and expenses of the Missouri, Kansas and Texas Railway Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$1,446,749.55	\$1,581,036.14	Decrease	\$124,286.59
Freight.....	4,707,251.92	4,612,021.15	Increase	95,230.77
Mail.....	251,118.01	226,020.51	Increase	25,097.50
Express	136,495.87	132,230.35	Increase	4,265.52
Miscellaneous	138,863.38	69,312.89	Increase	69,550.49
Total	6,680,478.73	6,620,621.04	Increase	59,857.69
EXPENSES.				
Conducting transportation	1,690,484.43	1,562,003.75	Increase	128,480.68
Maintenance of way.....	1,747,119.43	1,287,250.81	Increase	459,868.62
Motive power.....	1,593,994.71	1,596,361.58	Decrease	2,366.87
Maintenance of cars.....	386,441.78	323,670.59	Increase	62,771.19
General expenses and taxes.....	330,194.56	154,813.42	Increase	175,381.14
Total	5,748,234.91	4,924,100.15	Increase	824,134.76
Net earnings.....	932,243.82	1,696,520.89	Decrease	764,277.07
Average miles operated.....	1,616.00	1,594.00	Increase	22.00
Earnings per mile ^a	\$4,133.96	\$4,153.46	Decrease	\$19.50
Expenses per mile.....	3,557.08	3,089.15	Increase	467.93
Net earnings per mile.....	576.88	1,064.31	Decrease	487.43
Percentage of expenses to earnings.....	86.19	74.37	Increase	11.82

MISSOURI PACIFIC RAILWAY COMPANY.

This company owned and operated June 30, 1889, 1,422 miles of road, as follows:

	Miles.
Main line, St. Louis, Mo., to Omaha, Nebr., owned	494
Branches in Missouri, Kansas, and Nebraska, owned	674
Branches in Missouri and Kansas, leased	254
Total	1,422

In addition to these lines there are 29 miles of second track and 336 miles of sidings, making total length of track 1,787 miles. Steel rails of 52 to 63 pounds per yard are laid upon 1,347 miles and 52 to 56 pounds iron rails upon 75 miles.

The renewals consist of 5,302 tons steel rails costing \$223,786, and 324,571 ties of oak costing \$102,874. Ballast of stone, gravel, and cinder is now 336 miles in extent.

The rolling-stock consists of 321 locomotives, 183 of which have Westinghouse train brakes; 299 passenger-cars, all equipped with Westinghouse brakes and Miller couplers and platforms, and 10,953 cars in freight service and 40 used in road-repair department.

Financial condition of the Missouri Pacific Railway Company and Osage Division, June 30, 1889.

LIABILITIES.

Funded dept.....	\$44,376,000.00
Interest on same, due and uncalled for.....	88,802.50
Interest on same, not due.....	669,329.99
Bills and accounts payable.....	1,578,530.52
Pay-rolls and vouchers.....	2,219,448.70
Sundry accounts.....	18,006.25
Total debt.....	48,950,117.96
Capital stock.....	43,974,850.00
Total stock and debt.....	92,924,967.96

ASSETS.

Road, fixtures, and equipment.....	47,212,820.23
Real estate other than road.....	800,502.17
Fuel, material, and stores on hand.....	721,560.56
Cash on hand.....	384,737.19
Investments in stocks and bonds.....	47,471,950.26
Total assets.....	96,591,570.41
Surplus.....	3,666,602.45

Revenues and expenditures for year ending June 30, 1889.

REVENUES.

Earnings.....	\$9,692,835.18
Dividends and interest, other companies.....	565,195.26
Terminal facilities.....	172,915.03
Sundry amounts.....	193,909.76
	10,624,855.23

EXPENDITURES.

Operating expenses, including taxes and rentals.....	7,154,969.13
Interest on funded debt.....	2,465,876.67
Interest on other debt.....	218,404.33
Deficit in branch lines, earnings.....	124,539.38
Expense account, traffic association.....	15,471.06
Dividends, 32 to 35 inclusive, 1888-'89.....	1,758,994.00
Retained by United States, account land grant.....	531.24
Discount and premium.....	281,362.50
Sundry expenses.....	267,670.15
Total.....	12,287,818.46
Deficit.....	1,692,963.23

Statement of the earnings and expenses of the Missouri Pacific Railway Company for the year ending June 30, 1889.

EARNINGS.

Passenger.....	\$2,175,842.69
Freight.....	6,019,014.06
Mail.....	328,328.71
Express.....	233,280.38
Miscellaneous.....	936,369.34
Total.....	9,692,835.18

EXPENSES.

Maintenance of way and structures	\$1, 631, 415.99
Maintenance of equipment	1, 196, 200.04
Conducting transportation	3, 112, 208.48
General expenses	527, 634.89
Taxes and rentals	687, 509.73
Total	<u>7, 154, 969.13</u>
Surplus	<u>2, 537, 866.05</u>

NORTHERN PACIFIC RAILROAD COMPANY.

This company owns 2,172.90 miles of road, the main line extending from Ashland, Wis., to Portland, Oregon. It also leases 1,331 miles of branch lines, making a total of 3,465.10 miles owned and operated. The entire main line is laid with steel rails, and 836 miles are ballasted with stone and gravel.

During the year ending June 30, 1889, there was expended the sum of \$1,184,949.20 in construction, \$705,713.73 being on account of improving the old road, and \$479,235.47 for building new roads. The expenditure for new equipment amounted to \$319,598.32. The new rails laid during the year amounted to 9,860.13 tons of steel, at a cost of \$304,542.09, and 1,946,020 cross-ties were put in the track at a cost of \$588,305.42. The company has 877 miles of fencing of all kinds, and 2.8 miles of snow-sheds.

The equipment owned consists of 396 locomotives, 357 of which are equipped with Westinghouse brakes; 13 dining, 33 sleeping, 135 passenger, 56 baggage, mail and express, 37 combination, and 16 officers' cars, making a total of 290 cars in the passenger service, all of which are fitted with air-brakes and Miller platforms. In the freight service there are 4,918 box, 888 stock, 1,048 coal, 2,394 flat, 45 ferry and tank, 71 refrigerator, 15 fruit and 270 caboose cars, making a total of 9,649 cars in this service. In the road-repair service there are 141 cars.

The number of acres of land received by this company from the Government to June 30, 1889, was as follows: By patent, 1,031,031.78; by certificate, 20,196,262.16, making a total of 21,227,293.94 acres, of which 7,107,864.86 have been sold. From these sales the company has received \$24,820,509.97, and there are outstanding on account of time sales \$5,119,147.44.

The average price per acre for all sales to date is \$3.89, the maximum price being \$15, and the minimum price \$1.

Financial condition of the Northern Pacific Railroad Company, June 30, 1889.

LIABILITIES.

First-mortgage bonds	\$46, 943, 000.00
Other funded debt	36, 495, 500.00
Interest on funded debt, due and unpaid	125, 639.42
Interest on funded debt, accrued not due	1, 822, 660.00
Rentals, etc., accrued not due	375, 001.08
Bills payable	1, 975, 000.00
Accounts payable	901, 578.90
Pay-rolls and vouchers	3, 016, 055.21
Due other companies on account of traffic	17, 328.45
Suspense account balance	88, 680.69
Land sales, applicable to sinking fund	<u>2, 008, 886.19</u>

Earnings invested in equipment.....	\$2, 205, 239. 29
Revenue invested in sinking funds.....	2, 494, 004. 26
Total debt.....	98, 468, 573. 49
Capital stock.....	86, 172, 577. 91
Total stock and debt.....	184, 641, 151. 40

ASSETS.

Cost of road and fixtures.....	\$150, 509, 466. 64
Cost of equipment.....	12, 621, 585. 54
Invested in branches and other property.....	2, 579, 365. 00
Land contracts, land cash, etc.....	5, 119, 147. 44
Fuel, material, and stores on hand.....	2, 206, 645. 67
Cash on hand.....	1, 933, 894. 22
Company's stocks and bonds owned by company.....	25, 668. 55
Other stocks and bonds.....	3, 198, 945. 23
Miscellaneous investments.....	6, 768. 12
Sinking fund in hands of trustees—company.....	2, 494, 004. 26
Bills receivable.....	717, 142. 50
Accounts receivable.....	3, 841, 239. 50
Due from other companies on account of traffic.....	321, 406. 89
Cash in hands of trustees applicable to cancellation of bonds.....	334, 901. 67
Total.....	185, 910, 181. 23
Surplus.....	1, 269, 029. 83

Revenues and expenditures for year ending June 30, 1889.

REVENUES.

Earnings.....	\$19, 213, 264. 09
Dividends on stocks of other companies.....	205, 637. 59
Interest on bonds of other companies.....	4, 175. 20
Profits and interest on miscellaneous investments.....	395, 843. 34
Receipts of the land department.....	1, 585, 401. 86
Interest on sinking fund of company.....	4, 604. 40
Rentals—tracks and terminals.....	213, 000. 12
Increase in funded debt.....	1, 830, 000. 00
Sales of securities owned.....	1, 707, 641. 60
Decrease of property acquired under decree of court by sales of land, etc.....	1, 247, 014. 67
Total.....	26, 406, 582. 87

EXPENDITURES.

Operating expenses and taxes.....	\$11, 921, 335. 89
Interest on first-mortgage bonds.....	2, 753, 980. 50
Interest on other funded debt.....	2, 163, 852. 27
Rentals—tracks, terminals, and equipment.....	2, 220, 001. 27
Improvements and equipment, Cœur d'Alene Railway.....	21, 400. 86
Changing grade, Marshall, Mont.....	53, 330. 14
General interest and miscellaneous.....	73, 232. 52
Sinking-fund requirements—company.....	742, 280. 52
New construction.....	1, 184, 949. 20
New equipment.....	319, 598. 32
Increase in material and supplies.....	634, 151. 30
Expenses of land department.....	458, 272. 12
Branch lines, surveys and miscellaneous property.....	223, 603. 02
Increase in cash in hands of trustees, applicable to the cancellation of bonds.....	120, 345. 13
Decrease in capital stock.....	316, 040. 26
Land receipts credited to property account.....	1, 029, 640. 56
Decrease in current liabilities.....	2, 170, 568. 99
Total.....	26, 406, 582. 87

Comparative statement of the earnings and expenses of the Northern Pacific Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$5,824,163.28	\$4,577,898.36	Increase.....	\$1,246,264.92
Freight.....	12,877,837.84	10,424,244.48	Increase.....	2,451,593.36
Mail.....	443,637.77	399,151.64	Increase.....	44,486.13
Express.....	298,170.18	266,909.60	Increase.....	31,260.58
Miscellaneous	263,658.88	176,123.00	Increase.....	87,535.08
Total	19,707,467.95	15,846,327.88	Increase	3,861,140.07
EXPENSES.				
Conducting transportation.....	10,864,268.96	8,658,981.52	Increase.....	2,205,287.44
Maintenance of way.....				
Motive power				
Maintenance of cars.....				
General expenses and taxes	1,321,675.55	630,933.87	Increase.....	690,741.68
Total	12,185,944.51	9,289,915.39	Increase.....	2,896,029.12
Net earnings.....	7,521,523.44	6,556,412.49	Increase.....	965,110.95
Average miles operated	3,441.42	3,217.40	Increase.....	224.02
Earnings per mile	\$5,726.55	\$4,925.20	Increase.....	\$801.35
Expenses per mile	3,549.96	2,887.40	Increase.....	653.56
Net earnings per mile	2,185.59	2,037.80	Increase.....	147.79
Percentage of expenses to earnings	61.83	58.62	Increase.....	3.21

OREGON AND CALIFORNIA RAILROAD COMPANY.

The lines owned by this company are as follows :

	Miles.
East Portland, Oregon, to California State line	367.1
Portland, Oregon, to Corvallis.....	96.8
Albany Junction to Lebanon.....	11.5
Sidings and spur tracks	42.3
Total.....	517.7

Seventy-two per cent. of the whole line is now laid with steel rails, weighing from 50 to 60 pounds per yard. Nearly 449 miles of the road have been ballasted with gravel and stone.

The company has 49 locomotives, 40 being equipped with Westinghouse air-brakes; 50 cars in passenger service, all equipped with Westinghouse air-brakes and Miller platforms and couplers; 726 freight cars, and 233 cars for road-repair service; 1 car for use of officers, and 4 Pullman cars leased.

By an agreement made by this company with the Central Pacific Railroad Company, which was ratified by the Southern Pacific Company, the latter has secured control of this road and operates it as a continuous line between Portland, Oregon, and San Francisco, Cal.

The company has received by patent from the Government 323,068.68 acres of land, of which 269,442.88 have been sold. It has received from sales of land \$541,650.33, and there are outstanding on account of time sales \$394,226.58, of which the sum of \$98,992.42 is interest. The average price per acre for all sales to date was \$2.64, while the average price for sales made during the year was \$3.96.

Financial condition of the Oregon and California Railroad Company, June 30, 1889.

LIABILITIES.

First mortgage bonds	\$14,246,000.00
Interest on same	1,170.00
Dividends unpaid	2,583.23
Accounts payable	334,604.87
Income for redemption of bonds	72,334.32
Total debt	14,656,692.42
Capital stock	19,000,000.00
Total stock and debt	33,656,692.42

ASSETS.

Road, fixtures, and equipment	31,127,000.00
Real estate, other than road	40,078.95
Land contracts, land cash, etc	302,183.91
Sinking fund in hands of trustees	173,462.35
Bills receivable	1,570.00
Accounts	2,048,277.77
Total	33,692,572.98
Surplus	35,880.56

Comparative statement of the earnings and expenses of the Oregon and California Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$911,609.66	\$636,108.35	Increase	\$275,501.31
Freight	643,613.41	420,700.90	Increase	222,912.51
Mail	61,944.41	46,744.77	Increase	15,199.64
Express	27,023.34	26,195.03	Increase	828.31
Miscellaneous	43,038.27	23,176.77	Increase	19,861.50
Total	1,687,229.09	1,152,925.82	Increase	534,303.27
EXPENSES.				
Maintenance of way and structures	337,229.19	312,014.39	Increase	25,214.80
Maintenance of equipment	101,094.42	91,432.69	Increase	9,661.73
Conducting transportation	424,757.33	368,844.04	Increase	55,913.29
General expenses and taxes	154,274.74	112,973.36	Increase	41,301.38
Total	1,017,355.68	885,264.48	Increase	132,091.20
Net earnings	669,873.41	267,661.34	Increase	402,212.07
Average miles operated	461.80	448.80	Increase	13.00
Earnings per mile	\$3,653.59	\$2,568.90	Increase	\$1,084.69
Expenses per mile	2,203.02	1,972.51	Increase	230.51
Net earnings per mile	1,450.57	596.39	Increase	854.18
Percentage of expenses to earnings	60.29	76.78	Decrease	16.49

ST. JOSEPH AND GRAND ISLAND RAILROAD COMPANY.

The length of the main line of this road is 251.7 miles, with branch lines amounting to 202 miles, making a total of 453.7 miles operated. The entire main line is laid with steel rails. The ties are of white oak and average 2,800 per mile.

The rolling stock comprises 26 locomotives, all of which are equipped with the Westinghouse brake, 11 passenger, 5 baggage, mail and express, and 1 officers' car; making a total of 17 cars in the passenger department, all of which are equipped with Westinghouse brakes and Miller platforms. The freight equipment embraces 454 box, 99 stock, 41 coal, 43 flat, and 12 caboose cars; making a total of 649 cars in this department.

The company does not report any operations of its land department, but reports of the General Land Office show that 462,573.24 acres of land have been certified or patented by the Government.

The last report received from this company was that for the year ending December 31, 1888.

Financial condition of the St. Joseph and Grand Island Railroad Company, December 31, 1888.

LIABILITIES.	
First-mortgage bonds	\$6, 964, 000. 00
Certificates for first-mortgage bonds, etc	51, 344. 42
Interest on first-mortgage bonds	10, 520. 00
Other funded debt	1, 673, 000. 00
Certificates for second-mortgage bonds, etc	30, 382. 03
Interest on funded debt, due and unpaid	1, 400. 00
Interest on funded debt, accrued not due	70, 000. 00
Pay-rolls and vouchers	200, 945. 53
Due other companies on account of traffic	22, 693. 08
Accounts payable	654, 664. 69
Total debt	9, 678, 949. 75
Capital stock	4, 600, 000. 00
Total stock and debt	14, 278, 949. 75
ASSETS.	
Road fixtures and equipment	13, 230, 567. 88
Equipment and improvement fund	9, 740. 82
Fuel, material, and stores on hand	25, 722. 61
Stocks and bonds owned by company	468, 500. 00
Due from other companies and individuals	44, 734. 09
Bills receivable	471, 380. 20
Total assets	14, 250, 649. 60
Deficit	28, 300. 15

Revenues and Expenditures for the year 1888.

REVENUES.	
Earnings	\$1, 011, 109. 72
Interest on bonds owned	2, 160. 00
Discount and interest	1, 561. 39
Miscellaneous income	140, 917. 46
Total	1, 155, 748. 57
EXPENDITURES.	
Operating expenses	732, 748. 57
Interest on first-mortgage bonds	420, 000. 00
New construction	20, 840. 04
New equipment	200, 000
Organization expenses	4, 081. 53
Old construction, adjusted	240. 52
Total	1, 177, 250. 66
Deficit	21, 502. 09

*Credit.

ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY.

The number of miles owned and operated by this company is 1,208, being 490 miles from St. Louis, Mo., to Texarkana, Ark., and 718 miles of branch lines. In addition to this there are 10 miles of second track and 266 miles of sidings, making in all 1,484 miles of tracks, 890 of which are laid with steel rails of 52 to 76 pounds per yard. New steel rails were laid to the amount of 3,482 tons, at an expense of \$122,409; there were put in the track 500,300 new ties of oak, costing, with labor of laying, \$171,620. The ballasting has been increased 20 miles and some additions made to fencing.

The rolling stock consists of 172 locomotives, 110 of which have Westinghouse brakes; 111 cars in passenger service, all except 10 being equipped with Westinghouse train brakes and Miller couplers and platforms; 4,612 freight cars and 38 cars in road-repair service.

This company has received from the Government 1,327,704.86 acres of land, of which it has sold 598,725.98, and still holds 728,978.88 acres. The cash receipts from all sales to date amount to \$1,856,199.34 and there are outstanding on account of time sales \$492,684.49, of which the sum of \$65,047.99 is interest.

Financial condition of the St. Louis, Iron Mountain and Southern Railway Company, June 30, 1889.

LIABILITIES.

Funded debt.....	\$39,516,547.91
Interest on same, due and uncalled for.....	38,874.75
Interest on same accrued, not due.....	697,554.25
Accounts payable.....	2,226,980.61
Total debt.....	42,479,957.52
Capital stock.....	25,758,250.00
Total stock and debt.....	68,238,207.52

ASSETS.

Road, fixtures, and equipment.....	58,336,749.86
Real estate.....	537,284.72
Land contracts, land cash, etc.....	2,323,466.38
Cash on hand.....	328,883.47
Stocks and bonds owned by company.....	8,398,885.72
Advances on account of surveys.....	32,047.79
Accounts receivable (due from sundry railroads and individuals)....	1,846,079.42
Total assets.....	71,803,397.36
Surplus.....	3,565,189.84

Revenues and expenditures for the year ending June 30, 1889.

REVENUES.

Earnings.....	\$8,390,277.63
Profits on stocks and bonds of other companies.....	19,854.50
Sundry amounts.....	31,714.98
Total.....	8,441,847.11

EXPENDITURES.

Operating expenses.....	5,496,993.73
Interest on funded debt.....	2,404,868.46
Interest on other debts.....	3,514.03

Expense of traffic association.....	\$5,780.21
Retained by United States on account of land grant.....	11,899.85
Discount and premium.....	66,352.92
Sundry amounts.....	87,395.99
Total.....	8,076,805.19
Surplus.....	365,041.92

Comparative statement of the earnings and expenses of the St. Louis, Iron Mountain and Southern Railway Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger.....	\$1,694,183.71	\$1,595,229.86	Increase.....	\$98,953.85
Freight.....	6,052,100.62	5,928,019.17	Increase.....	124,081.45
Mail.....	195,900.67	191,844.29	Increase.....	4,056.38
Express.....	196,696.85	177,101.86	Increase.....	19,594.99
Miscellaneous.....	251,395.78	206,976.76	Increase.....	44,419.02
Total.....	8,390,277.63	8,099,171.94	Increase ...	291,105.69
EXPENSES.				
Conducting transportation.....	2,091,858.06	1,832,741.84	Increase.....	259,116.22
Maintenance of way.....	1,098,203.99	1,120,930.73	Decrease.....	22,726.74
Motive power.....	1,482,661.24	1,354,769.26	Increase.....	127,892.02
Maintenance of cars.....	386,169.96	389,101.09	Decrease.....	2,931.13
General expenses and taxes.....	194,418.10	155,805.10	Increase.....	38,613.00
Total.....	5,253,311.39	4,853,348.02	Increase.....	399,963.37
Net earnings.....	3,136,966.24	3,245,823.92	Decrease.....	108,857.68
Average miles operated.....	1,196.00	1,145.00	Increase.....	51.00
Earnings per mile.....	\$7,015.28	\$7,073.51	Decrease.....	\$58.23
Expenses per mile.....	4,392.40	4,238.73	Increase.....	153.67
Net earnings per mile.....	2,622.88	2,834.78	Decrease.....	211.90
Percentage of expenses to earnings.....	62.61	59.92	Increase.....	2.69

ST. LOUIS AND SAN FRANCISCO RAILWAY COMPANY.

The main line of this road extends from St. Louis to Seneca, Mo., a distance of 326.28 miles. It also operates 1,003.19 miles of branch lines, making a total of 1,329.47 miles of road operated.

During the year ending June 30, 1889, the company laid 2,311.11 tons of steel rails, at a cost of \$76,718.76, and 476,586 cross-ties, at a cost of \$113,851.56.

The rolling stock consists of 171 locomotives, 117 passenger cars, a one-half interest in 8 sleeping cars, 2,006 box cars, 1,051 stock cars, 1,668 coal cars, 39 flat cars, 50 refrigerator cars, 60 short mining cars, and 98 caboose cars. It also has 170 cars in road-repair service.

The following statements show the financial condition of the company June 30, 1889:

Financial condition of the St. Louis and San Francisco Railway Company, June 30, 1889.

LIABILITIES.

First-mortgage bonds.....	\$31,754,500.00
Interest on same, due and accrued.....	610,777.00
Interest on funded debt, accrued, not due.....	214,905.83
Dividends unpaid.....	257,500.00

Accounts payable.....	\$674,405.73
Pay-rolls and vouchers.....	611,811.24
Total debt.....	34,123,899.80
Capital stock.....	30,000,000.00
Total stock and debt.....	64,123,899.80

ASSETS.

Road, fixtures, and equipment.....	57,622,713.53
Fuel, material, and stores on hand.....	173,605.09
Cash on hand.....	396,114.48
Company's stocks and bonds owned by company.....	3,640,700.00
Other stocks and bonds.....	1,123,349.08
Miscellaneous investments.....	62,258.13
Bills receivable.....	1,838,019.95
Accounts receivable.....	2,241,784.05
Due from other companies on account of traffic.....	140,994.00
Total assets.....	67,239,538.31
Surplus.....	3,115,638.51

Revenues and expenditures.

REVENUES.

Earnings.....	\$5,807,175.75
Dividends on stocks of other companies.....	106.48
Interest on bonds of other companies.....	280.00
Interest and profits on miscellaneous investments.....	1,141,163.94
Total.....	6,948,726.17

EXPENDITURES.

Operating expenses, rentals, taxes, and improvements.....	4,094,344.03
Interest on other funded debt, and sinking fund.....	2,037,071.96
Dividends, 7 per cent. on first preferred and 4½ on preferred.....	765,000.00
Total.....	6,896,415.99
Surplus.....	52,310.18

Comparative statement of the earnings and expenses of the St. Louis and San Francisco Railway Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger.....	\$1,269,947.84	\$1,297,591.18	Decrease.....	\$27,643.34
Freight.....	4,029,281.06	4,265,370.57	Decrease.....	236,088.51
Mail.....	139,073.57	129,454.53	Increase.....	9,619.04
Express.....	135,960.05	144,699.01	Decrease.....	8,738.96
Miscellaneous.....	232,910.23	184,161.91	Increase.....	48,748.32
Total.....	5,807,175.75	6,021,277.20	Decrease.....	214,101.45
EXPENSES.				
Conducting transportation.....				
Maintenance of way.....				
Motive power.....				
Maintenance of cars.....				
General expenses and taxes.....				
Total.....	3,720,663.24	3,420,361.62	Increase.....	300,301.62
Net earnings.....	2,086,512.51	2,600,915.58	Decrease.....	514,403.07
Average miles operated.....	1,329.13	1,249.29	Increase.....	79.84
Earnings per mile.....	\$4,369.15	\$4,819.75	Decrease.....	\$450.60
Expenses per mile.....	2,799.32	2,737.84	Increase.....	61.48
Net earnings per mile.....	1,569.83	2,081.91	Decrease.....	512.08
Percentage of expenses to earnings.....	64.07	56.30	Increase.....	7.77

ST. PAUL AND DULUTH RAILROAD COMPANY.

The main line of this company extends from St. Paul to Duluth, Minn., a distance of 155 miles. It also owns 28.50 miles and leases 64 miles of branch lines, making a total of 247.50 miles operated. More than one half of the road is ballasted with gravel, and 211 miles are laid with steel rails.

During the year ending June 30, 1889, there were placed in the track 969 tons of steel rails, at a cost of \$12,917.97, and 95,737 cross-ties, at a cost of \$16,617.19.

The rolling-stock consists of 70 locomotives, 21 of which are equipped with Westinghouse brakes; 61 cars in the passenger service, all equipped with Westinghouse brakes and Miller platforms, and 2,432 cars in the freight service.

The number of acres of land received by patent from the Government was 815,482.75, and from the State of Minnesota 655,753.71, making a total of 1,471,236.46 acres. There had been sold 397,436.76 acres, the total receipts from all sales amounting to \$1,492,295.43, and there are outstanding on account of time sales \$201,015.84.

The following statement shows the financial condition of the company June 30, 1889:

Financial condition of the St. Paul and Duluth Railroad Company June 30, 1889.

LIABILITIES.

First-mortgage bonds	\$1,000,000.00
Second-mortgage bonds	2,000,000.00
Interest on same, accrued, not due	45,833.33
Other funded debt	710,000.00
Interest on same, accrued, not due	8,333.33
Dividends unpaid, No. 15	107,290.00
Accounts payable	68,514.78
Pay-rolls and vouchers	138,136.76
Sinking funds uninvested	85,767.79
State treasurer (taxes)	15,129.41
Deferred land and stumpage receipts	211,984.43
Land and stumpage income expended prior to July 1, 1888, in construction, improvements, and betterments	788,566.40
Total debt	5,179,556.23
Capital stock	10,057,118.11
Total stock and debt	15,216,674.34

ASSETS.

Road fixtures and equipment	12,735,098.65
Land contracts, land cash, etc	56,512.48
Fuel, material and stores on hand	103,795.48
Cash on hand	319,685.85
Other stocks and bonds	1,272,693.22
Miscellaneous investments	159,675.87
Other accounts	6,682.17
Sinking fund in hands of trustees company	85,767.79
Bills receivable	155,471.95
Accounts receivable	147,835.04
Due from other companies on account of traffic	65,190.08
Cash in hands of assistant treasurer for payment of dividend, No. 15	107,290.00
Total assets	15,216,598.58
Deficit	75.76

Revenues and expenditures for the year ending June 30, 1889.

REVENUES.

Earnings	\$1,406,865.74
Receipts of the land department.....	131,507.66
Rental Minnesota, St. Croix and Wisconsin, lease.....	15,000.00
Rental Duluth and Iron Range Railroad, lease.....	450.00
Depot facilities furnished Duluth and Iron Range Railroad.....	1,356.00
Premium on second-mortgage bonds.....	10,875.00
Dividends received.....	6,860.56
Amount allowed by Stillwater and St. Paul Railroad for expenditures made prior to January 1, 1889, which had been charged by St. Paul and Duluth Railroad to operating expense	15,470.07
Total.....	<u>1,588,385.03</u>

EXPENDITURES.

Operating expenses (including taxes and rentals)	\$1,131,283.76
Interest on first-mortgage bonds.....	50,000.00
Interest on second-mortgage bonds	69,701.65
Interest on other debt	19,294.19
Dividends: No. 14, declared December, 1888.....	187,750.50
Dividends: No. 15, declared July, 1889.....	107,290.00
Expenses of the land department.....	19,911.19
Expense account, second mortgage bonds.....	3,229.50
Total.....	<u>1,588,460.79</u>
Deficit.....	<u>75.76</u>

Statement of the earnings and expenses of the St. Paul and Duluth Railroad Company for the year ending June 30, 1889.

EARNINGS.

Passenger	\$395,232.42
Freight	963,929.06
Mail.....	18,174.08
Express	17,991.71
Miscellaneous.....	11,538.47
Total.....	<u>\$1,406,865.74</u>

EXPENSES.

Maintenance of way and structures	209,393.01
Maintenance of equipment.....	152,648.22
Conducting transportation	526,024.99
General expenses and taxes	164,327.52
Total.....	<u>1,052,393.74</u>
Surplus.....	<u>354,472.00</u>

ST. PAUL, MINNEAPOLIS AND MANITOBA RAILWAY COMPANY.

This company operates 3,024.44 miles of road, the main line extending from St. Paul to St. Vincent and Neche, Minn., connecting with lines running into Winnipeg, Manitoba, and westerly from Grand Forks, Dak., to Great Falls, Mont., with a connection to Helena, Mont. It also has numerous branches which act as important feeders to the main line. The entire main line is laid with steel rails.

By purchase and consolidation this company acquired the lines of the First Division St. Paul and Pacific Railroad and the St. Paul and Pacific Railroad Companies, and also certain lands granted to the

State of Minnesota to aid in the construction of a railroad through the route traversed by these lines. The total grant of lands to this company amounts to 3,848,000 acres, and there have been patented and certified for patent 3,156,433.62 acres. The quantity disposed of and the receipts are not furnished.

The equipment comprises 240 locomotives, 30 sleeping, 92 first-class, 8 emigrant, 55 baggage, mail and express, 22 combination, and 3 other cars, making a total of 210 in the passenger department, and 5,179 box, 528 stock, 1,953 flat, and 156 caboose cars, making a total of 7,816 cars in the freight department. There are also 135 cars used in road-repair service.

The last report received from this company was that for the year ending June 30, 1888.

Financial condition of the St. Paul, Minneapolis and Manitoba Railway Company June 30, 1888.

LIABILITIES.

First-mortgage bonds and other funded debt.....	\$55,283,943.80
Interest on funded debt, accrued, not due	200,093.33
Taxes not yet payable.....	148,144.93
Sinking fund.....	181,216.64
Fund for renewals and additions	1,045,037.95
Total debt.....	56,858,436.65
Capital stock.....	20,000,000.00
Total stock and debt.....	76,858,436.65

ASSETS.

Road, fixtures, and equipment.....	72,283,812.73
Fuel, material, and stores on hand.....	1,477,293.07
Cash on hand.....	1,152,101.27
Stocks and bonds owned by company.....	3,609,703.41
Miscellaneous investments.....	1,309,341.49
Total assets.....	79,832,251.97
Surplus.....	2,973,815.32

Revenues and expenditures for the year ending June 30, 1888.

REVENUES.

Earnings	\$9,561,905.51
Interest on miscellaneous investments	450,758.89
Receipts of the land department	271,938.66
Amount realized from sale of bonds issued	12,293,967.00
Net decrease of other assets.....	563,289.03
Sale of timber lands, non land grant.....	22,398.90
Unexpended balance of improvement fund	21,092.32
Increase of liabilities not current (undue taxes).....	68,900.50
Total.....	23,254,250.84

EXPENDITURES.

Operating expenses and taxes	5,419,986.83
Interest on funded debt.....	2,733,751.23
Reduction of funded debt.....	300,000.00
New construction	8,225,637.69
New equipment.....	1,464,127.59
Dividends	1,200,000.00

Securities purchased	\$1,727,930.18
Other properties purchased	1,830,885.90
Premium on bonds redeemed	15,000.00
Total.....	<u>22,977,319.42</u>
Surplus.....	<u>276,931.42</u>

SOUTHERN PACIFIC RAILROAD COMPANY OF CALIFORNIA.

The mileage of this company June 30, 1889, was—

	Miles.
Main line, Alcalde to Yuma, and branches	952.87
Coast division, San Francisco to Santa Margarita, and branches.....	304.71
Total.....	<u>1,257.58</u>

Many improvements have been made during the year in station buildings, bridges, and side tracks. The extensions made to main line and branches, amount in all to over 200 miles.

The rolling stock owned December 31, 1888, was 223 locomotives, 291 cars in passenger service, 5,091 cars in freight service, and 58 cars used in road-repair department.

The number of acres of land for which patents had been issued by the Government to December 31, 1888, was 1,230,075.38, of which 1,207,932.13 had been sold. The amount of cash received from sales of land to that date was \$5,959,264.21, and there was then outstanding on account of time sales \$3,264,410.25, of which \$79,069.73 was interest.

The last report received from this company was for the year ending December 31, 1888.

Financial condition of the Southern Pacific Railroad Company (of California) June 30, 1889.

LIABILITIES.

First-mortgage bonds.....	\$43,794,500.00
Accounts payable.....	1,682,966.53
Trustees, land-grant mortgage	468,383.86
Sinking funds uninvested.....	78,048.65
Total debt.....	<u>46,023,899.04</u>
Capital stock.....	<u>59,726,800.00</u>
Total stock and debt.....	<u>105,750,699.04</u>

ASSETS.

Road, fixtures, and equipment	111,589,770.51
Land contracts, land cash, etc	3,024,994.63
Cash on hand.....	324,559.41
Company's stocks and bonds owned by company	39,000.00
Sinking funds in hands of trustees.....	874,062.51
Bills and accounts receivable.....	542.97
Total assets.....	<u>115,852,930.03</u>

SURPLUS.

Income from land sales for redemption of bonds.....	\$9,114,878.49
Income for sinking funds.....	847,678.65
General income	139,673.85
Total.....	<u>10,102,230.99</u>

Comparative statement of the earnings and expenses of the Southern Pacific Railroad Company.

	Year ending June 30, 1889.	Year ending June 30, 1888.	Difference.	
			Increase or decrease.	Amount.
EARNINGS.				
Passenger	\$3, 129, 824. 19	\$2, 999, 371. 40	Increase.....	\$130, 452. 79
Freight	4, 717, 976. 81	5, 513, 570. 39	Decrease	795, 593. 58
Mail	120, 810. 04	116, 321. 14	Increase.....	4, 488. 90
Express	93, 823. 83	99, 728. 80	Decrease.....	5, 904. 97
Miscellaneous	460, 546. 17	141, 739. 47	Increase.....	318, 806. 70
Total	8, 522, 981. 04	8, 870, 731. 20	Decrease	347, 750. 16
EXPENSES.				
Maintenance of way and structures	1, 669, 975. 80	1, 479, 172. 60	Increase.....	190, 803. 20
Maintenance of equipment	836, 992. 37	681, 803. 28	Increase.....	155, 189. 09
Conducting transportation	3, 021, 591. 44	3, 291, 536. 04	Decrease.....	269, 944. 60
General expenses and taxes.....	634, 578. 23	610, 258. 46	Increase.....	24, 319. 77
Total	6, 163, 137. 84	6, 062, 770. 38	Increase.....	100, 367. 46
Net earnings.....	2, 359, 843. 20	2, 807, 960. 82	Decrease	448, 117. 62
Average miles operated.....	1, 240. 82	1, 090. 35	Increase.....	150. 47
Earnings per mile	\$6, 868. 82	\$8, 135. 67	Decrease	\$1, 266. 85
Expenses per mile.....	4, 966. 98	5, 560. 39	Decrease	593. 41
Net earnings per mile.....	1, 901. 84	2, 575. 28	Decrease	673. 44
Percentage of expenses to earnings....	72. 31	68. 35	Increase.....	3. 96

TEXAS AND PACIFIC RAILWAY COMPANY.

The thirteenth section of the act approved March 3, 1871, entitled "An act to incorporate the Texas Pacific Railroad Company, and to aid in the construction of its road, and for other purposes" (16 Stat., 573), provides :

SEC. 13. That the president of the company shall annually, by the first day of July, make a report and file it with the Secretary of the Interior, which report shall be under oath, exhibiting the financial situation of the company, the amount of money received and expended, and the number miles of road constructed each year; and further, the names and residences of the stockholders, of the directors, and of all other officers of the company, the amount of stock subscribed, and the amount thereof actually paid in, a description of the lines of road surveyed and fixed upon for construction, the amount received from passengers and for freight, respectively, on the road, a statement of the expenses of said road and its fixtures, and a true statement of the indebtedness of said company and the various kinds thereof.

The last report of this company, under the foregoing provision of law, was for the year ending June 30, 1886.

CONCLUSION.

The report of the railroad engineer is submitted herewith as Appendix No. 1, and gives full information as to the physical condition of the several railroads inspected by him.

Numerous requests having been addressed to this Bureau for copies of the laws relating to the railroads coming under its jurisdiction, I have caused a compilation to be made of the principal acts relating to the bonded and land-grant railroads, and submit it herewith as Appendix No. 2.

I have the honor to be, sir, very respectfully, your obedient servant,

H. A. TAYLOR,
Commissioner.

HON. JOHN W. NOBLE,
Secretary of the Interior.

REPORT OF RAILROAD ENGINEER.

DEPARTMENT OF THE INTERIOR,
OFFICE COMMISSIONER OF RAILROADS,
Washington, November 1, 1889.

SIR: I have the honor to submit the following report of the inspection of railroads coming under the supervision of this Bureau, made during the months of July, August, and September of the present year, and embracing the following roads: Union Pacific, Central Pacific, Sioux City and Pacific, Central Branch Union Pacific, Northern Pacific, Oregon and California, St. Paul and Duluth, Chicago, St. Paul, Minneapolis and Omaha, Burlington and Missouri River, in Nebraska, and Southern Pacific of California.

UNION PACIFIC RAILWAY.

The inspections of the main line from Omaha, Nebr., to Ogden, Utah, and the Cheyenne Division between Cheyenne and Denver, were made in August, in company with the division officers, by whose attention and courtesy full opportunities were given for examining the track, buildings, and equipment.

The mileage operated June 30, 1889, was:

	Miles.
Union Pacific, main line	1,040.48
Kansas Division	642.94
Leavenworth Branch	31.93
Cheyenne Division	106.08
Total Union Pacific	1,821.43
Auxiliary lines operated and controlled	3,073.84
Total of Union Pacific system	4,895.27

This shows a small increase during the year made by completing the Union Pacific, Lincoln and Colorado Railway in Kansas, which added 130.91 miles, and by building from Louisville, Colo., to coal mines, 3.28 miles.

The renewals of rails and ties have been so made that the track is kept in excellent condition. Upon the Union Division 123.5 miles of new steel and 20 miles of iron rails have been laid. Upon the auxiliary lines 69.2 miles of steel and 56.25 of iron have been used. Many additions have been made to side-tracks between Omaha and Ogden, amounting to 153,222 feet, and between Denver and Cheyenne to 3,467 feet.

New fences to the extent of over 75 miles have also been built upon these two divisions, and a commencement made to relay some of the track with 75-pound rails, about 20 miles of it being in use June 30, 1889. For renewals and repairs upon the whole system 1,446,222 ties have been used, of which more than one-third are of oak. Only a small amount of ballasting was done during the year.

At Omaha and Council Bluffs new sidings and connecting tracks of 10,984 feet length have been laid; a depot built at Thirteenth street, Omaha; an addition made to the oil-house at Omaha, and some new tools put into the machine-shop. At South Omaha the enlargement of sidings amounts to 10,060 feet. New passing tracks have been laid at Millard, Thurston, and Elkhorn.

The new buildings recently put up at several stations show that the company is desirous of pleasing its customers by providing for their use commodious depot buildings that have some architectural merit and solidity, in place of the very plain wooden boxes at first constructed.

At Valley there is a very neat stone and brick passenger house, brick engine and pump house, and elevated coal chute; the yard has been newly arranged and 5,580 feet of sidings put down. At Central City new stock-yards have been built. Columbus has an excellent stone and brick passenger house and well arranged yard.

Grand Island has a new twenty-five stall brick engine-house, elevated coal chute of forty pockets, good clinker-pit, stone shops for car and smith work, well arranged oil-house with large under-ground tanks, sand-house, and new sidings and spurs amounting to 14,860 feet. At Shelton and Gibbon new stock-yards have been built and sidings laid to the extent of 2,355 feet. At Kearney new sidings have been laid 3,608 feet in length. At Overton a new depot has been built. At North Platte the yard has been put in excellent order; new coal chute of thirty-two pockets, a clinker-pit and track scale have been put in, besides a large addition to side-tracks, equaling 6,634 lineal feet. The engine-house, shops, and yard show careful superintendence.

At Sidney the engine-house has been enlarged; new coal chute of twenty pockets built, and 1,185 feet of new sidings laid; the yard and buildings are in good order.

Cheyenne has been greatly improved by changes in the yard tracks and erection of new buildings. A large passenger house has been built of pink and white Colorado sandstone, giving abundant room for the division offices, and with wide platforms level with the track makes a most excellent improvement over the former building. A new machine-shop of brick wide enough for eight tracks and a brick smith shop are now under construction, and new sidings of 9,865 feet length are already laid; these improvements will make Cheyenne a very convenient division terminus. At Dana new coal mines have been opened; houses for the miners, and buildings for the working machinery nearly finished; machinery and fixtures well advanced, and 1,920 feet of sidings laid; the company expects to begin moving coal from this mine before December next. For the Hopkins and Van Dyke mines, new sidings and spur tracks have been laid to the extent of 20,661 feet.

At Rawlins the passenger house and hotel are of good size; the engine-house has twenty stalls; smith and machine-shop are of stone, good oil-house; all these buildings are in good condition. Green River station has been improved by new coal chutes, building a stone pump-house, putting in a large steam-pump, and laying 17 miles of 6-inch iron pipe leading to Rock Springs, which gives a good supply of excellent water for that station; the side-tracks have been extended 21,674 feet. At Rock Springs new track to the extent of 15,221 feet has been laid and new buildings with heavy machinery are well under way, which are intended to greatly increase the output of coal from these mines.

At Evanston new sidings have been laid to coal chutes and electric light-house, amounting to 3,666 feet, and new coal chute built.

At Almy new mine pump, boiler and pump house have been built for No. 7 mine, and tracks extended 7,569 feet, making a great improvement in the facilities for handling coal. New pump-houses have been built at Aurora and Medicine Bow, and new pipe-lines, tanks, and pump-houses at Granger and Church Buttes.

At Ogden a thorough change has been made by the removal of the old buildings and many of the tracks, changing the location of main track and sidings, laying 4,210 feet new tracks, erecting a handsome two-story building of brick and stone, with commodious rooms for the railway offices and the hotel department, putting up new freight-house and large addition to the ice-house. This work was done by the Ogden Union Railway and Depot Company, capital stock being \$300,000, which is equally divided between the Central and Union Pacific Railway Companies.

Between Denver and Cheyenne a new track-scale was put in at Greeley; watchman's house on section No. 1; 3,467 feet new sidings at Brighton and Irondale; about 1 mile of cinder ballast and 10 miles new fencing. The track is in good condition, but no renewal of rails has been made during the year.

The road-bed, track, bridges, and buildings generally have been kept in good condition.

KANSAS DIVISION.

The inspection was made in August, in company with the superintendent and other officers of the division, who rendered every facility for the examination.

The road-bed, track, and buildings have been well kept up to the standard of a first-class western road, very considerable expenditures having been made for buildings, bridges, and track materials, as well as for new steel rails of 75-pound weight to replace the 52 and 60-pound rails that were found to be too light for the business of some parts of the road.

The expenditures for the principal improvements made in the year ending June 30, 1889, amount to \$254,600, as follows: Ten trestle bridges rebuilt, \$6,268; two bridges replaced by iron-plate girders, \$10,171; one trestle replaced by iron pipes and earth embankment, and three bridges replaced by stone arches and earth filling, \$11,726; 70 miles of track relaid with 75-pound steel rails, viz, 2 miles between Kansas City Union Depot and Chicago, Rock Island and Pacific Railway Junction, and 68 miles between Topeka and Fort Riley. Cost after deducting value of rails removed, \$194,342.

New stone passenger-house at Lawrence: Dimensions, 42 by 153 feet, nearly completed, \$25,000; changes in station buildings at Watkins, \$767; changes made at Edwardsville station, \$809; new fencing at various places on the road, \$5,517. The expenditures for new sidings at Edwardsville, Newman, and Fall Leaf amounts to \$4,865.

The lines of railway now operated are as follows:

	Miles.
Kansas City, Mo., to Denver, Colo.....	639
Junction City to Concordia, Kans.....	70
Lawrenceburgh to Belleville, Kans.....	17
Solomon to Beloit, Kans.....	57
Salina to McPherson, Kans.....	36
Salina to Oakley via Lincoln and Colby.....	225
Armstrong to Wyandotte and Enterprise Spur.....	4
Total for the division.....	1,048

The Chicago, Kansas and Nebraska branch of the Chicago, Rock Island and Pacific Railway, recently put in operation between St. Joseph, Mo., and Colorado Springs, Colo., makes connections with the Kansas division at Colby, Kans., and Limon, Colo., the latter being a new station 89 miles from Denver by this road and 149 miles by the Chicago, Kansas and Nebraska and the Denver and Rio Grande lines.

CENTRAL PACIFIC RAILROAD.

The inspection was made in August and September of the main line between Ogden and San Francisco, passing over the whole of the subsidized road via Sacramento, Lathrop, and Niles to San José; also from Lathrop to Goshen, not subsidized, and from Roseville Junction to the State line of Oregon, for which lands have been granted by the United States.

The total length of lines belonging to this company and operated by the Southern Pacific Company was, June 30, 1889, 1,360.28 miles, of which 860.68 were subsidized by United States bonds and lands, and 296.5 miles, between Roseville Junction, on the main line, and the Oregon State line, by lands only.

There have been many improvements made upon this road during the past year, the principal being these:

Ogden, a new machine-shop was built, and changes made in sidings to conform with the lines of the new yard, as arranged in connection with the Union Pacific Railway.

Alta, a 50,000-gallon water-tank, 3,000 feet of 3-inch water-pipe and 577 feet of spur track were added.

Blue Creek, a new turn-table was put in; at Banta, a new combination passenger and freight house was built to replace one burned in April, 1888. Battle Mountain, a pump-house and coal platform were built. Blue Cañon, a small freight-house was put up; 1,500 feet of 3-inch pipe laid to replace former 2-inch pipe, and 1,654 feet added to side tracks. Black Butte is a new station, a turn-table and 1,464 feet siding were put in. At Coles, a small house, 17 by 33 feet, was built. Carlin, a new shop, and oil house, 24 by 28 feet, were put up. Clipper Gap, new 50,000 gallon tank and 539 feet of spur track put in.

At Cascade, new telegraph office and 346 feet spur track were added, and at Clark telegraph office was built. Cantara, a new station on the Shasta division, has 1,366 feet siding. Califa, a new station on the Visalia division, has 1,497 feet of spur track. At Cressid, a new station on Truckee division, 2,010 feet of side track was laid. An addition, 12 by 25 feet, was made to the passenger house at Deeth. Decoto, 16 by 18 feet, added to the passenger-house. Dunsmuir, track scale was put in and sidings increased 1,080 feet.

At Esquén a new combination passenger and freight-house, 16 by 30 feet, was built, Fresno, extensive changes are being made here; the freight-house is to be moved, new passenger-house being built, the sidings considerably lengthened, and the number increased; the freight-house will be 32 by 415 feet, and the passenger 36 by 116 feet. Gold Run, coal platform was extended. Gazelle, new combination passenger and freight-house was built, stock corrals enlarged, and 1,818 feet of siding laid. Hot Springs, new turn-table, engine-house, coal platform, and sand-house were built and sidings extended 1,172 feet. Haywards, a new corral has been built. Herndon, new 50,000-gallon tank built, well dug, and pumping engine set up.

At Kelton, new coal platform 16 by 67 feet has been built, and the water supply increased by laying 10,580 feet of 2-inch pipe from a new spring. Matlin, a new telegraph office and turn-table built. Niles, 50,000-gallon tank built and 1,446 feet of new siding laid. Redding, a large two-story building for passenger business and hotel purposes has been built, the main house being 32 by 144 feet, with two wings 25 by 84 feet and 25 by 46 feet. Rocklin, new 50,000-gallon tank built and new pipe line laid from Loomis. Stockton, new water-tank and water columns were erected.

At Sacramento extensive additions were made to the shops, comprising new machine and pattern shop 75 by 189 feet; paint-shop extension 91 by 189 feet; extension of machine-shop 96 by 112 feet; addition to boiler-shop 90 by 160 feet; addition to bolt and nut shop 24 by 53 feet; added to hammer and spring shop 21 by 39 feet; car shop extension 90 by 96 feet. These buildings are all well constructed of brick and iron, and are well supplied with excellent modern tools and machinery costing as per inventory nearly \$90,000; making this a very complete establishment well fitted for doing nearly every kind of work required for the railway and steamers of this company.

The wooden platform at the passenger-house has been removed and 12,879 square feet of bituminous rock pavement laid in its place. A baggage-room, 19 by 21 feet, has been added to the passenger-house, and a new fruit shed built.

A great improvement has been made in the yard-tracks by relaying them with 60-pound steel rails taken from the main line.

Terrace, engineer's bunk-house has been built and 1,493 feet of side track laid.

Winnemucca, new store-house, 22 by 42 feet, and passenger-house, 25 by 76 feet, were built to replace burnt house. White Plains, new turn-table and telegraph office. Oakland Wharf, new freight-house was built, and 9,801 feet of track laid, beside tracks extended in the yard 8,432 feet, and large additions to the wharf. San Francisco, 2 new freight-houses are under construction, one 60 by 510 feet, the other 75 by 684 feet.

New sidings and extensions have been made at a number of other stations amounting to 33,153 feet and the yards in San Francisco and Oakland improved by relaying sidings with 60-pound steel rails that were taken from the Sacramento division. A little more than one-half of the road is ballasted with stone and gravel; for renewals 251,596 ties were used. Upon the Sacramento division 2,692 miles of new 76-pound steel rails were laid to replace 60-pound steel rails considerably worn; 63.28 miles on other divisions have been relaid with 50 and 61.5-pound steel to replace 43.57 miles of iron and 19.71 miles of lighter steel.

New fences have been built, amounting to 37.35 miles. At Ogden and Carlin small additions have been made to the shop tools. At Terrace the new tools and machinery put in this year amount to over \$20,000. Some of the snow-sheds that have been burned will not be renewed at present. Extensive repairs have been made upon the others, and 2,840 linear feet new sheds have been built.

Bridge work has received much attention, renewals having been made of 4,288 linear feet of trestles. At Alameda Creek four spans of 80 feet each were substituted for ten truss-girder spans of 32 feet each. One span of 51 feet was renewed at Antelope Creek; one span of 165 feet and one of 150.5 feet renewed at Tuolumne River, and two spans of 129 feet each renewed at Merced River. The abutment and 60-foot span, destroyed by washout at Castle Creek bridge, were replaced by stone abutment and 100-foot span of iron. The road-bed, track, buildings, and fixtures, as well as the bridges, have been maintained in good condition, and the rolling-stock also is generally in excellent order.

The road between Oakland and Port Costa has been greatly improved since last year by completing the double-track system, and making ample provision for passing the numerous trains which come upon this part of the road from various directions. The track is not only well laid and ballasted, but the curves are well eased at the tangents with elevation so arranged that quite often, even at a speed of 40 miles per hour, there is no perceptible change of motion in passing from tangent to curve. This system of laying out curves will be used throughout the whole road wherever it can be done without unnecessary expense.

SIoux CITY AND PACIFIC RAILROAD.

Inspection was made in August, in company with the general superintendent, the road-bed, track, buildings, and equipment being found in good condition. A number of trestles have been filled with earth, cast-iron pipes being used for water-way, and the track has been much improved since last year. The length of road is the same as last year, 107.42 miles.

A new passenger house of brick has been built at Sioux City, dimensions 40 by 150 feet, with wide platforms around it and yard quite well graded. At Missouri Valley three new stalls of wood have been added to the engine-house; an excellent iron turn-table has been put in in place of the former wooden one; smith-shop has been built of brick; also a large shop of wood for car repairs and painters' use, and quite a number of good tools put in the machine and carpenter shops.

There were still 18 miles of 56-pound iron rails in the track June 30, but steel rails were on hand to replace these, so that before the close of this year the whole track will be laid with 60-pound steel, using a heavy 34-inch angle plate for the joints; 22,153 new ties of white oak and cedar were put in the track, and the sidings increased to 26.35 miles total length.

The rolling-stock consists of 12 locomotives, 5 of which have Westinghouse brakes; there are 14 cars in passenger service, all equipped with the Westinghouse brakes and Miller platforms and couplers; in freight and road repair service are 172 cars.

CENTRAL BRANCH UNION PACIFIC RAILROAD.

This road, with the branch lines connected with it, is leased and operated by the Missouri Pacific Railway Company. It is located in a fine farming country for the business of which other railways are close competitors.

The mileage on June 30, 1889, was:

	Miles.
Atchison to Waterville, Kans., owned.....	100
Waterville to Lenora, Kans., leased.....	193
Greenleaf to Washington, Kans., leased.....	7
Yuma to Warwick, Kans., leased.....	31
Downs to Alton, Kans., leased.....	23
Jamestown to Burr Oak, Kans., leased.....	34
Total.....	388

This inspection, which was made in August in company with the superintendent, was confined to the portion from Atchison to Waterville, Kans., 100 miles in length, which was aided by United States bonds. The road-bed and track were found to be in fairly good condition, forty thousand oak ties having been provided for renewals in this year, which, with the new split switches to replace many of the stubs, will make the track better than it was last year. The main track is now laid with steel throughout, the weight used being 52 and 56 pounds per yard. The sidings have been increased during the year to a total of 27.8 miles.

Very little ballasting has been done since last year, there being now 39 miles of stone, 33 miles of gravel and cinder, and 28 miles filled with ordinary soil. The fencing has been somewhat increased, and generally kept in order. The bridges and trestles are also in fair condition.

The rolling-stock appears to be fairly kept up, and consists of 35 locomotives, 12 of which have Westinghouse air and 5 have steam brakes; 23 cars in the passenger service are equipped with Westinghouse brakes and Miller platforms and couplers; 531 cars are in freight service, and 161 cars of all kinds in road-repair service.

There has been a new smith-shop built at Atchison, but no other changes made at the shops, except, perhaps, a few more leaks in roofs of engine and machine shops, of which there were too many last year.

The union depot at Atchison, which is now being constructed, will be a better and more convenient structure than the former building, which was burned nearly two years ago.

NORTHERN PACIFIC RAILROAD.

This road was passed over in September on the regular train, as there was not sufficient time to make the usual inspection. The road-bed, track, and equipment appear to be kept in very good condition, and material improvements made in the station buildings at many places.

The mileage June 30, 1889, was:

	Miles.
Ashland, Wis., to Portland, Oregon, via Tacoma.....	2, 117. 6
Pasco, Wash., to Wallula, Wash.....	16. 5
Northern Pacific Junction to Duluth, Minn., one-half owned.....	23. 5
Between Superior, Wis., and Duluth, Minn.....	7. 7
Coal spur to Cokedale.....	3. 6
Water-front lines at Tacoma, Wash.....	4. 0
Total owned.....	2, 172. 9
Leased lines, thirty-one in number.....	1, 292. 2
Total owned and operated.....	3, 465. 1

There are now 386.4 miles of siding and double track on the main line and 206 miles upon the leased lines, making total length of all tracks 4,057.5 miles, of which 83 per cent. is laid with steel rails of 35 to 80 pounds per yard, and 17 per cent. of iron weighing 35 to 56 pounds; 9,860 tons of new steel rails and 1,946,020 cross-ties were put into the track during the year.

The total amount of fencing is now 877 miles. Very little ballasting has been done during the year. The rolling-stock owned consists of 396 locomotives, of which 357 have the Westinghouse brakes. There are 290 cars of all kinds used in passenger service, all equipped with Westinghouse train brakes, Miller platforms and couplers; in freight service are 9,649 cars of all kinds, of which 4,176 have train brakes; for road repairs and other purposes there are 1,405 cars.

The improvements being made at Portland by the Terminal Company, of which a small part is now in use, are designed to be of great benefit to the roads interested.

At Tacoma there has been a large expenditure made by the Northern Pacific Railroad Company to increase the track room and wharf front, which heretofore has been very much cramped. The bridges, coal bunkers, and fuel stations have been much improved. The fall of a small part of the roof of the Stampede tunnel caused some delay to trains and a large expenditure for repairs. The tunnel is now well lighted by electricity, but repairs are not yet finished, although the trains pass through without delay.

Branch lines under construction.

	Miles.
Jamestown and Northern extension, Minnewaukon to Leeds, Dak.....	18
Northern Pacific and Montana, Canon House to Butte, Mont.....	70
Northern Pacific and Montana, Sappington to Pony and Red Bluff, Mont.....	30
Northern Pacific and Montana, Boulder to Elkhorn, Mont.....	20
Northern Pacific and Montana, Missoula westward.....	105

	Miles.
Coeur d'Alene Railway and Navigation Company, Mullen, Idaho, eastward	10
Central Washington, Davenport to Almira, Wash	46
Total	299

More than two-thirds of this will be completed during 1889, and the remainder about June 30, 1890.

OREGON AND CALIFORNIA RAILROAD.

This road was inspected in September, in company with the superintendent and other officers of the road, passing only over the main line from the State line of California to Portland, Oregon. Material improvement has been made in the condition of the track, as well as in the bridges, and to some extent in the road-bed and other parts of the property, the principal items of which are enumerated below:

The mileage reported December 31, 1888, was:

	Miles.
East Portland, Oregon, to California State line	387.1
Portland, Oregon, to Corvallis, west side division	96.8
Albany Junction to Lebanon	11.5
Total main line	475.4
Length of sidings and spur tracks	42.3
Total length of all tracks	517.7

There are now in the track 373.8 miles of steel rails, weighing from 50 to 60 pounds per yard, and 143.9 miles of iron rails of 35 to 56 pounds, the 35-pound rails being laid upon the Lebanon branch, where traffic is very light. Nearly 31 miles of steel rails and 185,000 ties were placed in the track and 31.8 miles well ballasted with gravel.

In addition to renewals of trestle-work, the truss bridges have been improved by erecting two spans of 150 feet each at Molalla River, one of 150-foot span at Santiam River, one draw-span over the Willamette, near Harrisburg, and one span of 150 feet at Rogue River bridge. At Ashland a commodious passenger house and hotel has been built; at Glendale a two-story passenger house and other improvements in the yard and water supply. At several places additions have been made to the fencing, smaller buildings, ice-houses, and tanks rendered necessary by the increase of business since the road was connected with the Central Pacific.

The property is in very good condition throughout, the track and equipment showing that good care and judgment have been used in making the improvements.

The transfer by ferry is still kept up between Portland and the terminus at East Portland, no agreement having yet been made by which this company can obtain the use of the Willamette River bridge and the new station grounds on the Portland side.

ST. PAUL AND DULUTH RAILROAD.

Inspection was made in July, in company with the general manager, passing over the new line between Thomson and West Superior, which was built for the purpose of avoiding the steep grades and sharp curves of the old line between Thomson and Duluth, which was built along the north bank of the St. Louis River.

The length of road operated by this company is 247.5 miles.

	Miles.
St. Paul to Duluth, Minn. (owned)	155
Rush City, Minn., to Grantsburg, Wis. (owned)	17
Sandstone Junction to Sandstone, Minn. (owned)	5
Northern Pacific Junction to Cloquet, Minn. (owned)	6.5
East Minneapolis to White Bear, Minn. (leased)	13.5
Stillwater to White Bear, Minn. (leased)	12.5
Wyoming to Taylor Falls, Minn. (leased)	20.5
Thomson, Minn., to West Superior, Wis. (leased)	17.5
Length of main line	247.5
Second track	7.5
Sidings	79.95
Total length of all tracks	334.95

of which 211 miles are laid with American steel rails, weighing 56 to 70 pounds per yard, the remainder being of American iron—50 to 56 pounds. Cross-ties are of oak, pine, and tamarack, averaging 2,750 per mile. There are 131 miles of track ballasted

with gravel. The rolling-stock consists of 70 locomotives, 3 of which have Eames' vacuum and 20 have the Westinghouse brake. In passenger service there are 59 cars, all of which are equipped with Westinghouse brakes and Miller platforms and couplers. In freight service are 2,438 cars, and 167 cars of all kinds used in road-repair service.

Under the new management there has been a great improvement made in many parts of the road.

Between St. Paul and White Bear the alignment has been changed and gradients reduced, resulting in tangents replacing the former series of curves, while 15 feet per mile gradients are used in place of 67 feet on the old location.

The new line between Thomson and West Superior, leased from the Duluth Short Line Railway, having lighter gradients and much less curvature, can be operated at less cost than the former line, and gives a good connection with the railways at Superior, securing excellent terminal facilities at that rapidly growing city.

There have been four iron bridges put up to replace wood and combination structures; a new freight-house has been built at West Duluth; a passenger house at Sandstone; new passenger and a freight-house at Grantsburg. These improvements are of a substantial nature, and must tend towards a more economical working of the trains and reduction of transportation expenses.

CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA RAILWAY.

Inspection was made in July of the portions of this road between Elroy, Wis., and St. Paul, Minn.; Hudson, Wis., and Duluth, Minn.; St. Paul, Minn., and Omaha, Nebr., and the branch from Coburn Junction to Ponco, Nebr., in company with the general superintendent and his assistants, who courteously furnished all facilities needed for the examination.

The road-bed, track, and buildings have been kept in good order, and in an improving condition generally. The mileage now operated is 1,394, of which 1,324 miles are owned and 70 miles leased or controlled. These lines extend from the junction with the Chicago and Northwestern Railway at Elroy, Wis., to St. Paul, Minneapolis, Sioux City, and Omaha: from Eau Claire, Wis., to Superior and Duluth, Minn.; from Hudson to Ashland and Bayfield, Wis., with a number of branches traversing a very good country for nearly the entire length of the road.

Renewals of rails and ties have been made to the extent of 91 miles of steel rails of 64 and 65 pounds per yard, with 34-inch heavy angle plates, and over 250,000 ties, about 30 per cent. being of oak, the remainder of pine and tamarack.

Some ballasting has been done, and preparations made for putting a crushing-machine at work to make stone-ballast for covering the sand upon some portions of the road where the dust is very troublesome.

The bridge over the Mississippi River at St. Paul is now completely rebuilt, one-half having been done last year and the remainder in 1889. New station buildings have been put up at Augusta and Lake Chrystal. Snow fences have been increased and 60 miles of wire fence put up. Two iron bridges were built to replace wooden structures and split switches adopted to replace the stubs, and an excellent improvement made by using heavy 34-inch angle-plates with the new steel rails in place of the short plates that have proved insufficient to hold the joints firmly.

The construction of the high iron bridge over the Missouri River, at Sioux City, has made a great improvement over the former transfer by ferry. The length of bridge and approaches on both sides of the river is about 4 miles. The bridge seems to be well constructed for the heavy traffic that will pass over it, but the connections upon the Iowa side do not appear to be arranged for a convenient and economical transfer of cars between the railway lines and the bridge track. This work was put in use December 5, 1888.

The rolling-stock is kept in very good condition, and consists of 235 locomotives, 155 cars in passenger service, 7,682 used for freight, and 25 cars for road-repair use.

BURLINGTON AND MISSOURI RIVER RAILROAD IN NEBRASKA.

The inspection was made in August of that portion of the subsidized road between Kenesaw and Plattsmouth, which is operated as part of the main line between Denver and Chicago. The remainder of the subsidized road from Kenesaw westward to Kearney, where it connects with the main line of the Union Pacific Railway, has but a small traffic and is kept only in moderately fair condition; but the main line has received good attention and is kept in excellent working order.

The mileage reported as being in operation June 30, 1889, amounts to 2,782 for the main line and its many branches, of which 190.66 miles has land subsidy. The changes and improvements made in the property consist of small additions to side and spur tracks at several stations.

The Denver, Utah and Pacific Railway, from Denver via Longmont to Lyons, Colo., which has been purchased by this company, was changed to standard gauge for a distance of about 40 miles.

The extension of the Grand Island and Wyoming Central Railroad from Alliance, Nebr., for 136 miles northwest, is now well advanced, and will probably be completed in November or December next. This line will cross the Fremont, Elkhorn and Missouri Valley Railroad near Crawford, Nebr., and enter the Black Hills country by the valley of Bear Creek, and will reach some good coal deposits.

SOUTHERN PACIFIC RAILROAD OF CALIFORNIA.

The inspection was made in August of the main line between Goshen and Colton, and of the branches.

The mileage of the southern division June 30, 1889, was:

	Miles.
Alcalde to Yuma	549.29
Los Angeles to San Pedro	24.24
Saugus to Elwood	91.50
Los Angeles to Santa Monica	16.83
Florence to Santa Ana	27.60
Berenda to Raymond	21.00
Stockton to Milton and Oakdale	49.00
Near Martinez to Tracy	46.51
Tracy to Newman	37.10
Miraflores to Tustin	10.80
Fresno to Porterville	69.30
Studebaker to Whittier	5.90
Thenard to Long Beach	3.80
Total	952.87

The extension from Porterville to Poso, 32.97 miles, and that from San Pedro to Ocean Pier, 2.46 miles, were built but not operated.

The following are the principal improvements made during the past year: Alpine, 50,000-gallon tank erected, well dug, and pumping-engine set up. Alexis, freight platform built, and 2,794 feet of siding laid. Bakersfield (name changed from Sumner), quite extensive changes were made here; new passenger house, 27 by 100 feet, dining-room 33 by 88 feet, with wing 35 by 48 feet, substantially built of brick with slate roofing and asphalt pavements around the building; also a new machine-shop of brick, 84 by 235 feet, has been built, and 4,741 feet of new track laid in the yard. The old passenger-house was moved several hundred feet to the north and changed into a freight-house; a pump-house was built over the wells in Kern River bottom, and another 50,000-gallon tank erected in the yard.

Cucamonga, 50,000-gallon tank erected. Girard, 50,000-gallon tank erected. Indio, passenger house and hotel was built to replace one that was burned. Kent, a small freight-house was put up.

Los Angeles, the new passenger-house and yard in connection with it has been completed and opened for business. The arcade portion is 83 feet wide and 503 feet long, containing commodious waiting and dining rooms, with ticket office, baggage, and express company's rooms on the ground floor, and conveniently arranged rooms for the division offices upon the second floor; this portion is 37 feet wide and 397 feet long, leaving abundant room for three tracks and wide asphalt walks for the passengers. The whole structure is well lighted, well built, and a handsome addition to that part of the city.

Mojave, a house was built for the division superintendent and additional coal-tracks laid of 6,062 feet length. Poso, a combined freight and passenger house was built and the station made the terminus of the Fresno division. Pampa, the water supply was improved by digging a well and setting up a pumping-engine. Spadra, new well was dug and 7,000 feet of 3-inch pipe laid to connect with the tanks.

Additional sidings have been put in at Aurant, Beaumont, Banning, Lang, Mortmore, Nahant, Ruthven, Rochester, Tulare, Tehachapi Summit, Walters, and Vincent, amounting to 19,402 feet.

During the year 19.91 miles of track have been relaid with 61.5-pound steel rails, replacing 8.02 miles of iron and 11.92 miles of lighter steel; 215,407 ties have been used in renewals. The fencing has been increased by an addition of 31,250 feet. The whole property has been well kept up to the standard usual with this company, and is in excellent working condition.

SOUTHERN PACIFIC OF CALIFORNIA—COAST DIVISION.

The inspection of this line, formerly called The Northern Division, was made in August in company with the superintendent, who courteously extended every facility needed for full examination of the main line and branches.

The mileage of the division is now :

	Miles.
San Francisco to Tres Pinos	100.49
Camadero to Santa Margarita	153.10
Castroville to Monterey	15.12
Pajaro to Santa Cruz	21.20
Aptos to Monte Vista	7.00
Hillsdale to Almaden	7.80
Total	304.71

The principal improvements made during the past fiscal year are enumerated below, viz:

Extension of main line from Templeton to Santa Margarita, 14 miles; extension of Loma Prieta line, 2 miles; additions made to side tracks, 6 miles; 48,454 sawed black-heart redwood ties put into the track; from this quality of timber it is expected to obtain from ten to twenty years' use; the ballast has been increased considerably; the old stubs are being steadily replaced by the improved Wharton split switches.

Twelve miles of iron and 19 miles of light steel rails have been replaced by new steel of 50 and 61.5-pounds per yard, making the whole main line track now of steel. The equipment has been increased by the addition of 6 new Schenectady locomotives, 18 by 24 inch cylinders; one new Baldwin tank locomotive, 15 by 22 inch cylinders; 10 new passenger cars; also 4 cabooses, 110 flat and 150 box-cars, that were built at the shops of this division.

The following bridges have been renewed: Leonard, two spans of straining-beam truss 80 feet each, and thirteen spans of trestles 16 feet span each; Bush's Gulch, five spans of trestle 72.5 feet length; San Francisco, two spans of 80 feet each, and at Mission Slough, seventeen spans of trestle 263 feet length.

The station buildings also have been improved.

At San Francisco the old passenger house was removed, and a new, well-arranged two-story building put up at Third and Townsend streets, size 70 by 105 feet, with platforms and sidewalks of bituminous rock, measuring 36,136 square feet, which makes an excellent change from the wooden platforms of the former station; a sand-house 15 by 50 feet was erected at the shops, and car-inspector's house at the passenger yard. At San Carlos a new stone passenger house has been built at an expense of nearly \$10,000. At San Mateo a platform of bituminous rock 7,871 square feet and one of plank have been laid; also plank platforms at Greystone, Mountain View, and Fair Oaks.

At San Ardo and Aptos coal platforms have been built, and a new corral at Soquel 35 by 81 feet. Renewals of turn-tables have been made at Gilroy and Monterey, and a pumping engine put up at Castroville. Many smaller improvements have been made upon the road, and at the date of inspection the track, bridges, buildings, and road-bed were found to be in excellent condition and the rolling stock also in good repair.

The extension of the track beyond Monterey and the improvements being made there will probably cause some increase of travel upon that branch, already so popular with all persons who have visited Monterey and the famous Del Monte hotel.

GENERAL REMARKS.

The railway managers have generally adopted the policy of using heavier rails than was customary only a few years ago, and at this date the increased weight has become quite noticeable on many lines, the old standard 56 and 60 pounds per yard being now considered rather too light to withstand heavy and rapid trains, and in place of the former patterns can be found sections of much better shape, weighing from 65 to 90 pounds per yard, and with heavy and longer angle plates.

The engines and cars have been so greatly increased in weight that it has become necessary to renew much of the bridging also, many of the recent structures being much stronger than the trusses they replaced. The subsidized lines have been very prompt in adopting such improvements as seem to have merit.

The length of main track of the railways of the United States reported to December 31, 1882, was 156,082 miles, showing an increase for the year of over 6,000 miles.

I take pleasure in acknowledging the invariably courteous treatment shown me by the officers of the railways inspected.

Respectfully submitted.

THOS. HASSARD.
Railroad Engineer.

HON. H. A. TAYLOR,
Commissioner of Railroads.

REPORT OF THE COMMISSIONER OF INDIAN AFFAIRS.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, October 1, 1889.

SIR: The fifty-eighth annual report of the Commissioner of Indian Affairs is respectfully submitted.

I entered upon the discharge of the duties of this office July 1, 1889. I have had no time as yet to familiarize myself fully with the details of office administration nor to make myself acquainted by personal observation with the practical workings of the Indian field-service. As soon as practicable, I hope to do both.

Unexpectedly called to this responsible position, I entered upon the discharge of its duties with a few simple, well-defined, and strongly-cherished convictions:

First.—The anomalous position heretofore occupied by the Indians in this country can not much longer be maintained. The reservation system belongs to a “vanishing state of things” and must soon cease to exist.

Second.—The logic of events demands the absorption of the Indians into our national life, not as Indians, but as American citizens.

Third.—As soon as a wise conservatism will warrant it, the relations of the Indians to the Government must rest solely upon the full recognition of their individuality. Each Indian must be treated as a man, be allowed a man's rights and privileges, and be held to the performance of a man's obligations. Each Indian is entitled to his proper share of the inherited wealth of the tribe, and to the protection of the courts in his “life, liberty, and pursuit of happiness.” He is not entitled to be supported in idleness.

Fourth.—The Indians must conform to “the white man's ways,” peaceably if they will, forcibly if they must. They must adjust themselves to their environment, and conform their mode of living substantially to our civilization. This civilization may not be the best possible, but it is the best the Indians can get. They can not escape it, and must either conform to it or be crushed by it.

Fifth.—The paramount duty of the hour is to prepare the rising generation of Indians for the new order of things thus forced upon them. A comprehensive system of education modeled after the American public-school system, but adapted to the special exigencies of the Indian youth, embracing all persons of school age, compulsory in its demands and uniformly administered, should be developed as rapidly as possible.

Sixth.—The tribal relations should be broken up, socialism destroyed, and the family and the autonomy of the individual substituted. The allotment of lands in severalty, the establishment of local courts and police, the development of a personal sense of independence, and the universal adoption of the English language are means to this end.

Seventh.—In the administration of Indian affairs there is need and opportunity for the exercise of the same qualities demanded in any other great administration—integrity, justice, patience, and good sense. Dishonesty, injustice, favoritism, and incompetency have no place here any more than elsewhere in the Government.

Eighth.—The chief thing to be considered in the administration of this office is the character of the men and women employed to carry out the designs of the Government. The best system may be perverted

to bad ends by incompetent or dishonest persons employed to carry it into execution, while a very bad system may yield good results if wisely and honestly administered.

INDIAN EDUCATION.

The Superintendent of Indian Schools, Daniel Dorchester, D. D., entered upon his duties on the 1st day of May, 1889, and is now engaged in a thorough inspection of the whole school service. By appointment of the Secretary of the Interior, Mrs. Dorchester has been engaged in special inspection of schools.

SCHOOL EMPLOYÉS.

Recognizing the truth of the adage that "as the teacher, so is the school," special pains have been taken to secure the best available talent in the school service. Believing that what is good enough for a white man is good enough for an Indian, the effort is being made to develop for the Indians a non-partisan, non-sectarian public-school system.

As indicative of the efforts put forth to secure good teachers, I submit a copy of a letter that is mailed to those who apply for positions in the school service:

Your application for appointment as teacher has been received. Inclosed please find blanks to be filled out and returned.

It is the purpose of the office to appoint no person as a teacher in the Indian school service who would not be able to secure a similar position in the best schools for white children in the community in which he resides. Indeed, the exigencies of Indian schools are such as to require a higher order of talent to secure success than is required in ordinary teaching.

Emphasis is laid upon the fact that those who are engaged in the Indian school service should be persons of maturity, of vigorous health, with some experience in teaching, and with special fitness for the work. Preference is expressed for those who have had a normal-school training. It is very undesirable that persons should enter the service who, by reason of ill health, age, or other infirmities, are unable to do full, vigorous work.

* * * * *

BOARDING-SCHOOLS OFF FROM RESERVATIONS.

The system of boarding-schools off from reservations, now in successful operation, is slowly but surely accomplishing revolutionary and desirable results. Children from different tribes are brought together under influences where all tribal differences disappear. They learn to respect each other, and are prepared for association together as fellow-citizens. They hear and use only the English language, are removed from the contaminating influences of camp life, become accustomed to the usages of civilization, and are trained to habits of industry, thrift, and self-reliance.

THE "OUTING SYSTEM."

I quote from the American Citizen part of an article written by Mr. H. M. Jenkins, an intelligent and experienced observer of the practical workings of the system:

The plan of "placing out" the young men and young women from the Indian schools maintained by the Government has now been in operation for more than ten years, and has acquired, both as to the numbers so placed and as to the measure of success realized, proportions which can not be questioned. The Indian is capable of

sustained, systematic labor. He is a good worker. He has traits of his own, but he has the general characteristics of mankind. Where he differs from the white man the points of difference are not all to his discredit or his disadvantage. The inheritance he has of tradition and training includes many things which civilization itself demands and excludes some things which have attached themselves to civilization in spite of its protests.

It was a favorite idea of Captain Pratt, now superintendent of the Indian school at Carlisle, when, in the years from 1867 to 1875, he served on the frontier with his regiment, that the Indian would work, and that the way to teach him practically and easily was to place the young people among the farmers of the East. While in charge of the Indian prisoners in Florida from 1875 to 1878 Captain Pratt began the work, and in the two years succeeding he helped General Armstrong organize the placing-out system at the Hampton school, securing places for some of the pupils in western Massachusetts in the summer of 1878. Hampton continues the system, and has increased the number sent out. Last year it was about fifty. At Carlisle, however, the plan is more extensively followed. From that school sixteen were sent out in the summer of 1880, and, including that party, there have now been "outings," varying in length from a few weeks to a year or more, for 1,288 boys and 502 girls, counting in these figures the repetitions of those out more than once. This summer there were out at the beginning of July 245 boys and 107 girls, say, in round numbers 350. This is double the average of the ten years, and shows how favorably the system is regarded by the three parties concerned—the Indians themselves, the white families who employ them, and the authorities at Carlisle. The steady increase of the number put out comes about naturally. The pupils desire to go. "During the latter part of winter, and through spring and summer, until they are sent out," says a competent authority on the subject, "Captain Pratt is daily besought by the pupils to give them a chance to go out this year. The opportunity to earn their own way is popular." Last year the number sent out was 225 boys and 101 girls, so that this year shows the usual growth.

These young Indians have been placed in all the counties of southeastern Pennsylvania, and in others of the interior—Cumberland, Columbia, Luzerne, Juniata. Some have gone to New Jersey and Maryland, a few to Ohio and Massachusetts. A larger part of the boys, however, have been placed with the farmers of Bucks County, and many of the girls in Montgomery, Chester, and Delaware. (The two sexes are not sent to the same neighborhood, nor is it usual to place two of the same tribe in one family.) It is a common thing, therefore, to see, at this time, Indian lads and Indian young men at work in the fields of Bucks County, and to find Indian girls cooking and waiting on table in farm-houses of the counties adjoining. Here are the Aboriginal people returned! Here are Cheyennes, whose fathers of the same Algonquin blood as our tribes of the Delaware, kept faith with them centuries ago, and speaking a related dialect of the one language, held the same traditions and the same antipathies. But here, too, are a score of other tribes represented. In the family of the writer there have been, in three years, girls from the Cheyennes, Oneidas, Pueblos, and Pawnees. In neighboring families have been others from the Winnebagoes, Apaches, and Kiowas. And the list beyond these neighborhood examples is extensive.

I recently spent several days with Captain Pratt visiting the pupils from Carlisle Industrial School now scattered among the Pennsylvania farmers, and can fully indorse what Mr. Jenkins says above.

The system admits of large expansion and will be productive of the happiest results. These young Indians are brought into the most vital relationship with the highest type of American rural life. They acquire habits of neatness, industry, thrift, and self-reliance. They acquire a good working knowledge of English, and a practical acquaintance with all kinds of domestic and farm work. They associate with the farmer's children, eat at the same table, attend the same church and Sunday-school, and four months of each year attend the same day school. A better scheme for converting them into intelligent, honest American citizens, self-respectful and self-helpful, could scarcely be devised.

THE HIGHER EDUCATION OF THE INDIANS.

Heretofore little has been attempted by the Government towards securing for the Indians anything more than a very rudimentary English and industrial training. The time generally supposed to be required to "educate" a non-English speaking Indian, fresh from the wilds of a

reservation, and to fully equip him for life even amid the distressing surroundings of his barbarous home, has been three years. The absurdity of the idea is apparent to any intelligent man who will give ten minutes thought to it. It is no easier to educate an Indian than to educate a white man, and takes no less time. The increased difficulties that confront the young Indian just from school on returning to the reservation is a powerful argument for giving him a longer, more complete education even than is given to the average white child. Very few of the white boys from our grammar schools are prepared to cope with the difficulties of "getting on in the world" amidst the discouragements of reservation life.

RETURNING TO THE RESERVATION.

The young Indians should receive a thorough education to fit them for maintaining themselves, and then should be free to seek a home for themselves anywhere they please. There is no more reason for compelling self-reliant Indian boys and girls to return against their will to an Indian reservation than there is of forcibly sending white boys and girls thither. This whole reservation system is an abomination that should cease to exist.

Pupils that prefer to return to their people should be encouraged and helped until they are able to withstand the dreadful influences of camp life and to establish and maintain homes for themselves. But the policy of the Government should be to encourage the Indian pupils educated in the industrial schools to seek homes for themselves wherever they can find the best opportunities to earn an honest living.

NEW SCHOOL BUILDINGS.

Special efforts are being put forth to increase the number as well as the efficiency of Government schools, with a view of providing as soon as practicable proper school facilities for all Indian youth of school age not already provided for. This work will be pressed as far and as fast as the means and the force at the disposal of the Indian Office will allow.

During the last fiscal year new buildings were furnished boarding schools at the Fort Peck, Mescalero, Otoe, Puyallup, Santee and Warm Springs Agencies, and large additions were made to those at Devil's Lake and Omaha.

Two special appropriations of \$25,000 each were made by Congress for the establishment of a training school at Pierre, Dak., and another in Ormsby County, Nev., upon tracts of land donated to the Government for that purpose. At Pierre a brick building to accommodate ninety pupils is now in course of erection. The site accepted for the Nevada school is 8 miles from Carson City. The new building, for which plans have been prepared and bids asked, will, with buildings already donated with the site, provide for ninety pupils. A building for a new training school at Santa Fé, N. Mex., is in course of erection, for which Congress, at its last session, appropriated \$6,000 to supplement an appropriation of \$25,000 made in 1885. It will accommodate one hundred and forty pupils.

Under special provision of the Indian appropriation bill for the current fiscal year, the Government has purchased for \$10,000 the buildings and improvements at Keam's Cañon, Ariz. For two years past some of these buildings have been rented by the Government in order to furnish a school for the Moquis Pueblos. The location is admirable and the only suitable one which could be found for a school readily ac-

cessible to the Moquis. With some changes in the buildings seventy-five pupils can be provided for there.

Authority has been granted and in most cases work has already commenced on new buildings for the Pima, Navajo, Fort Hall, Yankton, and Blackfeet boarding schools and for large additions to the Wichita, Osage, Standing Rock, and Siletz school buildings.

INDUSTRIAL TEACHERS.

Those who are called upon to teach Indians various industries have a delicate and difficult task. Inquiries have been instituted with a view of finding men of good judgment, exemplary habits, a knowledge of tools, industrious, and capable of teaching the Indians to work.

NUMBER OF SCHOOLS, ATTENDANCE OF PUPILS, ETC.

The following table shows the attendance at the various schools during the past year :

TABLE 1.—Showing number, capacity, and cost of schools, number of employes and enrollment and average attendance of pupils during fiscal year ended June 30, 1889.

Kind of school.	No.	Capacity.	Enrollment.	Average attendance.	No. of employes.	Cost to Government.
<i>Controlled directly by Indian Bureau:</i>						
Boarding schools.....	63	5,005	4,842	3,561	573	\$524,262.03
Day-schools.....	77	3,083	2,863	1,744	104	58,630.78
Industrial training schools.....	7	1,760	1,955	1,631	219	286,182.71
Total Government schools.....	147	9,848	9,660	6,956	892	869,075.52
<i>Conducted by private parties:</i>						
<i>Under contract with Indian Bureau:</i>						
Boarding-schools*.....	59	5,686	4,038	3,213	547	299,993.18
Day-schools.....	26	1,486	1,307	662	43	16,138.79
Schools specially appropriated for by Congress.....	7	970	779	721	131	108,668.67
Total.....	92	8,142	6,124	4,596	721	424,800.64
Aggregate.....	239	17,990	15,784	11,552	1,617	1,293,876.16

In the following table statistics in detail are given in regard to the seven training schools, and the seven other schools specially appropriated for mentioned above.

TABLE 2.—Showing attendance, cost, etc., of training schools and of other schools specially appropriated for, during fiscal year ended June 30, 1889.

Name of school.	Location.	Number pupils.	Rate per an-num.	Capacity.	Number of employes.	Enrollment.	Average attendance.	Cost to Government.
<i>Controlled directly by Indian Bureau:</i>								
Albuquerque training....	Albuquerque, N. Mex	.....	\$175	200	29	219	172	\$30,100.00
Carlisle training.....	Carlisle, Pa.	.....	167	500	56	625	595	81,000.00
Chemawa training.....	Near Salem, Oregon	.....	175	250	35	193	156	29,257.88
Chillico training.....	Chillico, Ind. T.	.....	175	200	28	203	155	28,421.82
Genoa training.....	Genoa, Nebr.	.....	175	200	27	191	160	36,250.00
Grand Junction training.	Grand Junction, Colo	.....	175	60	5	28	16	6,793.24
Haskell Institute.....	Lawrence, Kans	.....	175	350	39	496	377	74,359.77
Total.....				1,760	219	1,955	1,631	286,182.71

* Four of these schools are conducted by religious societies which employ the teachers. Government assists these schools, without formal contract, by issuing rations and clothing to the pupils.

TABLE 2.—Showing attendance, cost etc., of training schools, etc.—Continued.

Name of school.	Location.	Number pupils.	Rate per annum.	Capacity.	Number of employees.	Enrollment.	Average attendance.	Cost to Government.
<i>Specially appropriated for:</i>								
Eastern Cherokee training	Swain, County, N. C.	80	150	80	12	82	80	\$10,000.00
Hampton Institute	Hampton, Va.	120	167	150	31	127	116	19,372.00
Lincoln Institution	Philadelphia, Pa.	200	167	250	30	215	208	33,400.00
St. Benedict's Academy	St. Joseph, Minn.	50	150	175	13	50	48	8,271.35
St. John's Institute	Collegeville, Minn.	50	150	200	7	55	50	5,105.32
St. Ignatius Mission	Flathead, Mont.	150	150	400	20	176	153	22,500.00
White's M. L. Institute	Wabash, Ind.	60	167	80	18	74	66	10,020.00
Total		710		1,345	131	779	721	108,668.67
Aggregate				3,105	350	2,734	2,352	394,851.38

In the two following tables comparative statements are given as to the attendance at schools for a series of years.

TABLE 3.—Showing enrollment and average attendance at Indian schools for the fiscal years 1887, 1888 and 1889.

Kind of school.	Enrolled.			Average attendance.		
	1887.	1888.	1889.	1887.	1888.	1889.
<i>Controlled directly by Indian Bureau:</i>						
Boarding	6,847	6,993	6,797	5,276	6,533	5,212
Day	3,115	3,175	2,863	1,896	1,929	1,744
Total	9,962	10,173	9,660	7,172	8,462	6,956
<i>Conducted by private parties:</i>						
Boarding (under contract)*	2,763	3,234	4,038	2,258	2,694	3,213
Day (under contract)	1,044	1,293	1,307	604	786	662
Specially appropriated for	564	512	779	486	478	721
Total	4,371	5,039	6,124	3,348	3,958	4,596
Aggregate	14,333	15,212	15,784	10,520	12,420	11,552

* Four of these schools are assisted by the Government, but not under formal contract. See note on previous page.

TABLE 4.—Showing Indian school attendance from 1882 to 1889, both years inclusive.

Year.	Boarding-schools.		Day-schools.	
	Number.	Average attendance.	Number.	Average attendance.
1882	71	2,755	54	1,311
1883	75	2,599	64	1,443
1884	86	4,358	76	1,757
1885	114	6,201	86	1,942
1886	115	7,260	99	2,371
1887	117	8,020	110	2,500
1888	126	8,705	107	2,715
1889	136	9,146	103	2,406

MISCELLANEOUS MATTERS.

FARMERS.

In order to carry out fully the intention of Congress regarding the development of agriculture among the Indians, the following circular has been addressed to agents :

SIR: I wish to call your special attention to a paragraph in the act of Congress making appropriations for the Indian service for the current fiscal year in reference to the employment of farmers for the Indians, which reads :

To enable the Secretary of the Interior to employ practical farmers, in addition to agency farmers now employed, at wages not exceeding \$75 per month, to superintend and direct farming among such Indians as are making effort for self-support, \$50,000; and no person shall be employed as such farmer who has not been in at least five years previous to such employment practically engaged in the occupation of farming.

The evident purpose of Congress in making this appropriation, under the conditions attached, was to insure greater advance in farming among the Indians, not only by securing men who are successful farmers themselves, but who are able to incite a desire for farming among the Indians, and to teach and direct them in the work, and therefore I consider that the provisions of the act, although apparently limited to what are called "additional farmers," apply to all persons employed as farmers in the service, and not only to those to be appointed, but also to all now so employed, without regard to date of original appointment.

* * * * * *

PHYSICIANS.

The life of a physician on an Indian reservation with poor accommodations, small salary, and few of the modern appliances and help for the practice of his calling, is dreary enough to all except to him who realizes the noble part he may perform in helping to lift this people out of their superstitious regard for the grotesque rites of the "medicine men." There is opportunity for a large exercise of that self-sacrificing spirit which is characteristic of the medical profession.

The following paper is sent to all who apply for appointment :

SYNOPSIS OF QUALIFICATIONS AND DUTIES OF AGENCY PHYSICIANS.

To be eligible to the position of agency physician the applicant ought to have a good general education, must be a regular graduate of some reputable medical college, and be actually engaged in the practice of medicine. He must be between twenty-five and forty-five years of age, temperate, active, industrious, in sound health, and must possess a good personal and professional character. The application for appointment must be made upon blanks provided for the purpose, which will be furnished upon request. A copy of the applicant's diploma and of his license to practice medicine must be filed at the same time. Married men are preferred to those who are single.

Attending to private practice or other business outside of the agency is prohibited, as it leads to endless complaints and opens the door for neglect of official duties. The physician must devote his entire time and professional skill to the Indians and agency employes.

He should at all times strive to overcome the evil influence of the native "medicine men," to abolish their superstitious rites and barbarous customs, to gain the respect and confidence of the Indians, and to extend his influence among them by kind treatment, exemplary habits, and prompt attention to the cases requiring medical assistance. He should be governed by the highest code of professional conduct.

The agency physician is required not only to attend to those who call upon him at his office, but also to visit the Indians at their homes, and, in addition to prescribing and administering needed medicines, to do his utmost to educate and instruct them in proper methods of living, and of caring for health.

He should exercise special care in regard to the sanitary condition of the agency and schools, and promptly report to the agent any condition, either of building or grounds, liable to cause sickness, in order that proper steps may be taken to remedy the evil.

The physician is required to make regular visits to the Indian schools, and during such visits he should give short talks to the pupils on the elementary principles of physiology and hygiene, explaining in a plain and simple manner the processes of digestion and the assimilation of food, the circulation of the blood, the functions of the skin, etc., by which they may understand the necessity for proper habits of eating and drinking, for cleanliness, ventilation, and other hygienic conditions. The correct manner of treating emergency cases, such as dangerous hemorrhage, syncope, prostration from heat, etc., should also be explained.

Classes should be formed composed of the most advanced and intelligent pupils, for special instruction by the physician in regard to nursing and caring for the sick, administering medicines, and preparing food for invalids, and any other points of like character on which it would be proper to give such pupils instruction.

A full statement of what the physician has done in the directions above noted should accompany his monthly reports.

Monthly reports must be made to this office upon blanks furnished for the purpose, showing the number of cases and the nature of the diseases treated, care being taken to note that all the footings are correctly made, that the reports are prepared in a neat, legible manner, that all the cases appearing as treated are properly accounted for, and that the cases remaining under treatment at the end of each month are properly carried forward to the report for the succeeding month. Indian sanitary statistics should be full, accurate, and absolutely reliable.

In connection with the monthly sanitary report the physician must, from time to time, note the progress which the Indians are making toward abandoning their medicine men and adopting rational methods of treating and nursing the sick. Special attention should be given to the matter of hospitals.

The agent, being a bonded officer, is responsible under his bond for all medical supplies at his agency, and the physician must exercise prudence and sound judgment in expending such supplies. At the end of each quarter a report of medical property must be made on the proper blanks and be handed to the agent to be forwarded with his accounts to this office.

Harmony is essential to the proper conduct of an agency, and the physician, though appointed directly by this office, must treat the agent with proper respect, promptly and cheerfully obeying all orders issued by him.

HOSPITALS.

There is an urgent need for the establishment of hospitals.

Many of the physicians are doing excellent service among the Indians under their care, and to a great extent are destroying the influence of the "medicine men," but they are continually hampered in their efforts by the unhygienic surroundings of their patients, the lack of proper food, and the impossibility of devoting proper time and attention to each patient on account of the number of Indians and the extent of the reservations under their oversight. With incompetent nurses to care for the patients in absence of the physician, it is next to impossible to have any instructions, however simple, properly carried out.

Many of the difficulties encountered would be obviated if a hospital were constructed at each agency for the treatment of cases requiring the constant attention of the physician and the care of trained nurses. Small buildings suitable for the purpose could be erected at comparatively slight cost to begin with, and should the necessities of the service increase, the hospital facilities could be gradually enlarged to meet the requirements.

But few additional employes would be required in consequence of the establishment of such hospitals. For each hospital a steward, a matron, one or two nurses, with a cook, a laundress, and a servant would be sufficient. Intelligent Indians who have attended the various training schools can be found at nearly all the agencies and could be utilized for the positions mentioned, as they would be under the constant supervision and direction of the physician, and being accustomed to obey orders would in most cases follow his instructions. The salary list would be quite small considering the benefit that would be derived from such expenditure.

In this connection I believe it would result in great good to the Indians if instruction in the art of nursing were given in the Indian training schools, as it would impress upon the youth who attend those institutions the beneficial results obtained from the rational care of the sick as contrasted with the methods of the medicine men.

Wherever hospitals have been established they have, so far as I am informed, been fruitful of good results, and I am firmly convinced that by judicious management a small hospital at each of the agencies can be made an important factor in furthering the work of civilization among the Indians.

ALLOTMENTS OF LAND IN SEVERALTY.

Since the publication of the last annual report the work of making allotments on the Winnebago Reservation, in Nebraska, and the Grande Ronde reservation, in Oregon, under the act of February 8, 1887 (24 Stat., 388), has been completed by Special Agents Fletcher and Collins, respectively. The schedules of the allotments on the first named reservation will be transmitted to the Department as soon as the necessary clerical work can be completed. Before acting upon the allotments at Grande Ronde it will be necessary to await the receipt of the plats and field-notes of certain additional surveys made in the field.

Allotment work was continued on the Crow Reservation, in Montana, by Special Agent Howard, until the weather put a stop to further operations in the field. It has not been resumed owing to the need of additional surveys, a subject which was brought to the attention of the Department in reports from this office dated, respectively, April 2 and 17, 1889.

Special Agent Minthorn commenced work on the Warm Springs Reservation in Oregon, in November last, and continued the same until he was obliged to suspend it, owing to the fact that the disputed location of the northern boundary rendered it impossible to determine what lands could properly be selected by the Indians. This question has now been settled, and on the 26th of July last, Special Agent Minthorn was instructed to resume and complete the work of allotments. He reports, however, that owing to the absence of the Indians from the reservation, who are laboring for the whites and preparing food for winter, it will be impracticable to resume operations for the present.

Under date of April 23, 1889, Special Agent Porter was instructed to complete the allotments to the Absentee Shawnees and Citizen Pottawatomies in the Indian Territory, and he is now engaged in that work, without, however, any prospect of completing it this season.

April 27, 1889, Special Agent James G. Hatchitt was instructed to proceed to the Yankton Reservation, Dak., for the purpose of carrying forward the work commenced in 1887, by late Special Agent West. His reports indicate that the allotments are proceeding satisfactorily, and with a reasonable prospect of completion during the present year.

Under date of April 13, 1889, the President granted authority for making allotments on the Lapwai or Nez Percé Reservation in Idaho, revoking the authority for that purpose granted July 7, 1887. A new authority was regarded as necessary in view of the fact that the date of the order is the basis upon which the ages and status of allottees are determined. May 4, 1889, Special Agent Alice C. Fletcher was instructed to make the allotments on the said reservation in Idaho, and she is now engaged in the work.

April 13, 1889, the President granted authority for making allotments on the Devil's Lake Reservation, in Dakota, revoking that granted April 19, 1887. June 10, 1889, Special Agent Malachi Krebs was instructed to make the allotments, and soon after entered upon duty. These Indians had been for several years located on separate farms, and were represented as anxious to have their lands allotted, but upon Special Agent Krebs's arrival they most unexpectedly refused to make their selections. The principal ground of their opposition was that they would be subject to personal taxation, and that the treaty under which they hold their lands allows single persons on becoming of age a greater quantity of land than is allowed minors under the severalty act. Two councils were held, at which Special Agent Krebs and Agent Cramsie endeavored to remove their objections, but without material result. A few of the young men have expressed a desire to make their selections and will be encouraged to do so. No further steps have been taken, owing to the illness and death of Special Agent Krebs.

May 21, 1889, the President granted authority for making allotments on the Oneida Reservation in Wisconsin, the authority granted November 27, 1887, having been revoked March 2, 1889. June 18, 1889, Special Agent Dana O. Lamb was assigned to the duty of making the allotments. Work, however, has been temporarily suspended, owing to the difficulty of making a satisfactory division of the land. Many of these Indians have for years past been cultivating farms upon the reservation, but when they were located no regard was paid to the regular survey, the selections being laid out to suit the convenience of the Indians; consequently as many as seven persons have occupied and improved portions of the same eighty-acre tract. The matter is now receiving consideration with a view of adopting some plan for its proper adjustment.

May 8, 1889, Spencer Hartwig, who had been appointed a special agent under the act of February 8, 1887, was directed to make allotments to the United Peorias and Miamis, in the Indian Territory, under the act of March 2, 1889 (25 Stat., 1013), and when that work should be finished to complete the work of making allotments on other reservations belonging to the Quapaw Agency, which was commenced by Special Agent Howard in 1888.

During the year 1,341 patents have been issued to the Indians of the Lake Traverse Reservation in Dakota, which will be delivered at an early day. The allotment of lands on this reservation having been practically completed, recommendation was made June 21, 1889, that an officer or officers be designated to negotiate for the relinquishment of such portion of the surplus lands as the Indians might be willing to cede, and instructions for the guidance of such commission have been prepared and submitted for your approval.

The schedule of allotments made by late Special Agent Connelly on the Fond du Lac Reservation in Minnesota was submitted to the Department February 13, 1889, with the recommendation that they be not approved, for the reason that the lands are mainly valuable for timber and are not adapted to agricultural or grazing purposes. This officer has not been advised of the action taken by the Department in the matter.

Forty-eight patents have been issued to members of the Bad River band, and thirteen to members of the Lac du Flambeau band of Chippewas of Lake Superior, under the treaty of September 30, 1854 (10 Stat., 1109), the allotments having been made by the agent prior to February 8, 1887.

The work of carrying out the provisions of the general allotment act appears, on the whole, to be progressing as satisfactorily and as rapidly as a due regard to the condition of the Indians will permit. In the practical application of the act, however, many perplexing questions are constantly arising. The Indians on some reservations claim that an equal division of all the land should be made, alleging that as each individual owns an undivided interest in the whole this is but just and equitable. Others maintain that each individual without regard to age, including married women, should secure the same quantity of land, instead of the differing amounts provided for the various classes in the general allotment act. Still others claim that allotments of equal area should be made and in larger quantities than are provided for in that act, and this plan was adopted in the case of the Miamies, Peorias, and affiliated bands by the act of March 2, 1889. (25 Stat., 1013.)

In my opinion the first claim does not deserve much attention, especially as to reservations containing an area largely in excess of the amount necessary to fill the requirements of the general allotment act, and entirely beyond the actual needs of the Indians. The plan might be adopted on smaller reservations, where an equal division would not give each individual more than, say, 200 acres.

The second claim seems just and equitable, and if the general allotment act should be amended so as to give each person, without regard to age or condition, including married women, an equal quantity, say 160 acres, it would prove satisfactory to a large majority of the Indians, and would avoid many of the difficulties which now stand in the way of inducing them to take their lands in severalty. The act provides for the allotment of different quantities of land to heads of families, single adults, orphans, and minors, while married women are not entitled to any. The looseness of the marriage relation among many of the tribes often renders it difficult to determine the exact status of the women, and there is danger that many who are living as wives at the time allotments are made will be discarded and thus be landless, while their husbands, having the maximum quantity of land, will take as wives other women who have land. An Indian reservation is the common property of the tribe by which it is owned, or for whose use it is assigned. Each member has an equal right therein, and upon division should receive an equal share. It does not seem just to divide this common property so as to give one member four times as much as another, and also to deprive a considerable number of all share in it.

The allotment of an equal quantity of the tribal landed estate to each member of the tribes occupying or interested in the reservation would remove the principal inequalities of the general allotment act, so strongly complained of, and there would be less hesitation on the part of many of the tribes to the taking of land in severalty.

There are now seven special agents engaged in making allotments in severalty to the Indians, as provided by act of February 8, 1887 (24 Stat., 388), as follows: Alice C. Fletcher, at Nez Percé Agency, Idaho; Spencer Hartwig, at Quapaw Agency, Indian Territory; Dana C. Lamb, Oneida Reservation, Wisconsin; Malachi Krebs,* Devil's Lake Agency, Dakota; N. S. Porter, Absentee Shawnees and Citizen Pottawatomies, Indian Territory; J. H. Minthorne, Warm Springs Agency, Oregon; James G. Hatchit, Yankton Agency, Dakota.

Special Agent Edward Collins, having completed his duties at the Grande Ronde Agency in Oregon and submitted his final report, was relieved from duty July 13, 1889.

* The death of Special Agent Krebs was reported to this office on September 23d.

LANDS FOR NON-RESERVATION INDIANS.

During the year numerous cases have been reported where white men have forcibly dispossessed non-reservation Indians of lands long in their possession, and upon which they had made valuable improvements, cultivating the soil and supporting themselves without aid from the Government. In a recent report (April 30, 1889), United States Indian Agent Gwydir, of the Colville Agency, said:

The whites are swarming into the Territory—Washington—and every piece of good land is being taken and the Indians are being driven off and gotten rid of by fair or foul means, for in many instances whites have taken forcible possession, driving the Indians whenever the poor Indian refused to be persuaded to leave the home where his forefathers have dwelt for generations.

He cited the case of one Indian, Pa-ock-a-tin, or Pierre, who, with his family, had resided upon a certain tract of land for seventy-seven years, upon which a white man appeared and, upon application, was allowed to enter the same under the homestead laws. This case was reported to the Department, with recommendation that the entry be canceled, and the Indian be allowed to make application to have the land allotted under the fourth section of the general allotment act.

Under date of April 9, 1889, this office received through the War Department a communication stating that two Indians, "Ska-miah Alotat" and "Yan Puss" claimed certain lands for a home, basing their rights upon occupancy of the same prior to the extension of the public survey thereover; that one Jensen and companion appeared upon the ground, both armed with guns, and ordered the Indians off, inclosed their lands and threatened them with death if they should again be found therein. The Indians, however, attempted a second time to plow their fields, when they were again driven away by the same parties, since which time they have made no further efforts in that direction.

These cases were reported to the Department, with recommendation that the proper United States district attorney be instructed to institute in the suitable court such proceedings as are necessary to reinstate the Indians in the possession of their lands. They are cited to show the efforts made by white men to dispossess Indians of land long claimed, occupied, and used by them, and the perils to which they are exposed in their endeavors to retain the homes where their forefathers dwelt, and which they have continued to cultivate and improve. Many cases of similar character have been reported to this office, and in every instance prompt action has been taken to secure to the Indians the possession of the lands which they occupy.

In this connection it is gratifying to note that there is a tendency on the part of many of the non-reservation Indians to secure title to their homes. This is due to some extent to the fact that the country is fast settling up by whites, and the Indian sees that he must make an effort to obtain a permanent title, or he will be dispossessed by the white man; but in many instances the Indian voluntarily seeks a home for himself and family.

* * * * *

THE INDIAN CRIMES ACT.

Prior to March 3, 1885, there was no law of the United States under which an Indian committing offenses against the person or property of another Indian on an Indian reservation could be punished; no court having been given jurisdiction of such cases.

By the ninth section of the Indian appropriation act of that date (23 Stats., 385), Congress made provisions for the punishment of certain crimes by Indians, as follows:

That immediately upon and after the date of the passage of this act all Indians committing against the person or property of another Indian or other person any of the following crimes, namely, murder, manslaughter, rape, assault with intent to kill, arson, burglary, and larceny within any Territory of the United States, and either within or without an Indian reservation, shall be subject therefor to the laws of such Territory relating to said crimes, and shall be tried therefor in the same courts and in the same manner, and shall be subject to the same penalties as are all other persons charged with the commission of said crimes, respectively; and the said courts are hereby given jurisdiction in all such cases, and all such Indians committing any of the above crimes against the person or property of another Indian or other person within the boundaries of any State of the United States, and within the limits of any Indian reservation, shall be subject to the same laws, tried in the same courts and in the same manner, and subject to the same penalties as are all other persons committing any of the above crimes within the exclusive jurisdiction of the United States.

The case of the United States against Kagama and another, Indians of the Hoopa Valley Reservation, Cal., indicted under this law for murder committed upon the person of another Indian within the said reservation, was brought to the Supreme Court of the United States by a certificate of division of opinion between the circuit judge and the district judge holding the circuit court of the United States for the district of California. The division of opinion was upon two questions (1) as to whether the provisions of the above-quoted section (making it a crime for one Indian to commit murder upon another Indian, upon an Indian reservation wholly within the limits of a State of the Union, and making such Indian "subject to the same laws," to be "tried in the same courts, and in the same manner, and subject to the same penalties as are other persons" committing the crime of murder "within the exclusive jurisdiction of the United States,") is a constitutional and valid law of the United States; and (2) as to whether the courts of the United States have jurisdiction or authority to try and punish an Indian belonging to an Indian tribe for committing the crime of murder upon another Indian belonging to the same Indian tribe, both sustaining the usual tribal relations, said crime having been committed upon an Indian reservation, made and set apart for the use of the Indian tribe to which said Indians belong.

In disposing of this case the United States Supreme Court held that "the ninth section of the Indian appropriation act of March 3, 1885, (23 Stats., 385), is valid and constitutional in both its branches, namely, that which gives jurisdiction to the courts of the Territories of the crimes named (murder, manslaughter, rape, assault with intent to kill, arson, burglary, and larceny), committed by Indians within the Territories, and that which gives jurisdiction in like cases to courts of the United States for the same crimes committed on an Indian reservation within a State of the Union." (118 U. S. R., 375.)

Since the Supreme Court rendered this decision several Indians have been tried by the United States courts and convicted of murder and other crimes named, committed upon an Indian reservation within a Territory, the courts holding that, were the crimes committed by a white man on an Indian reservation situated within the limits of a Territory, the United States court and not the Territorial courts would have jurisdiction over the offense, and that since the act provides that an Indian committing within a Territory and on an Indian reservation any of the crimes named in section 9 "shall be tried therefor in the same courts, and in the same manner, and shall be subject to the same penalties as are other persons charged with the commission of said crimes," the

United States court has jurisdiction over these crimes committed by one Indian against the person or property of another Indian on an Indian reservation within a Territory.

Gon-shay-ee, an Apache Indian in Arizona, who, in accordance with that construction of the law, was tried in the United States court for that Territory, and condemned to death for the crime of murder, petitioned the Supreme Court of the United States for a writ of habeas corpus, alleging that the court which tried him had not at the time the trial took place, and in the mode in which it was pursued, any jurisdiction of the case against him. In acting upon this petition the court held that "The act of March 3, 1885 (23 Stats., 385), section 9, was enacted to transfer to Territorial courts established by the United States the jurisdiction to try the crimes described in it (including the crime of murder), under Territorial law, when sitting as, and exercising the functions of, a Territorial court; and not when sitting as, or exercising the functions of, a circuit or district court of the United States under Revised Statutes, section 1910." (130 U. S. R., 343; to like import, see Captain Jack, petitioner, *ibid.*, 353).

Owing to the indisposition on the part of the Territorial authorities to put the Territories to the expense of prosecuting Indian criminals, great difficulty has been experienced in bringing Indians who were guilty of crimes against other Indians, committed upon an Indian reservation, to trial, and many cases have been permitted to pass unnoticed. This difficulty is, however, now obviated by the provision of section 11 of the Indian appropriation act of March 2, 1889 (25 Stats., 1004), whereby the costs of such trials in the Territorial courts are directed to be paid out of money appropriated for similar expenses in the trial of criminal cases in the courts of the United States.

Now that the question of jurisdiction under the act of 1885 is authoritatively and permanently settled, and the costs of the trials in the Territorial courts are assumed by the United States, it is thought that no further difficulty will be experienced in bringing Indian criminals to justice; and it is believed that by a judicious execution of the laws, in the imposition of punishment commensurate with the crime, Indians will be deterred from committing offenses against each other, and that in the future crime among them will be materially decreased.

COURTS OF INDIAN OFFENSES.

Since 1882, what is known as a "court of Indian offenses" has been established and maintained upon a number of Indian reservations. It has been a tentative and somewhat crude attempt to break up superstitious practices, brutalizing dances, plural marriages, and kindred evils, and to provide an Indian tribunal which, under the guidance of the agent, could take cognizance of crimes, misdemeanors, and disputes among Indians, and by which they could be taught to respect law and obtain some rudimentary knowledge of legal processes. Notwithstanding their imperfections and primitive character, these so-called courts have been of great benefit to the Indians and of material assistance to the agents.

Prior to the last fiscal year there was no fund for maintaining these courts, nor any law recognizing their existence, although this office had made repeated and urgent recommendations that provision be made for the pay of judges of the courts. The want of such a fund has often necessitated the appointment of incompetent persons as judges, the designation of police officers to act in that capacity, or the payment of

the salaries of the court officials from funds derived from the collection of fines imposed by them. Such anomalies have, of course, lessened the efficiency of the courts. The appropriation act of June 29, 1888, contains the following item :

For compensation of judges of Indian courts, at such rate as may be fixed from time to time by the Secretary of the Interior, five thousand dollars, or so much thereof as may be necessary.

Under this legislation it is practicable to make important changes and improvements in the organization of the "courts of Indian offenses" and the methods adopted therein, and it is my purpose to revise the rules and regulations now in force regarding them.

In order to acquaint the Indians with the jury system, it should be applied in these courts in a manner conforming as nearly as possible to the law of the land on the subject, in all cases of sufficient importance which do not fall within the provisions of the ninth section of the act of March 3, 1885 (23 Stat., 385), and especially when a jury is demanded by either party. An appeal should lie to this office in all cases.

Each court should have a marshal, who should be an Indian, whose duties should be clearly defined, and who should have reasonable compensation for his time and services.

The judges of these courts should have increased compensation commensurate with the duties, responsibility, and dignity of their positions, and Congress should appropriate funds to pay the salaries of judges and other proper and necessary expenses.

The fines collected should be used for improvements on the reservations, such as repair of roads, building bridges, the maintenance of hospitals, etc.

No officer of the police force should be allowed to sit as a jurymen, or to act in the capacity of a judge or marshal.

It will be my aim to establish these courts at agencies where none have yet been put in operation, and to increase the usefulness of those already established. To do this an increased appropriation will be necessary, and I have estimated for the sum of \$25,000 for the ensuing fiscal year.

INDIAN POLICE.

For a number of years past provision has been made for the employment of Indians as policemen to suppress traffic with Indians in intoxicating liquors, to put down other forms of lawlessness, and to preserve order generally upon Indian reservations. The position is one requiring intelligence, discretion, and courage, and in the selection of policemen care has always been exercised to secure the best men possible. Owing to the meager compensation allowed this is no easy matter. A policeman whose entire time is taken up by his official duties can not support a family upon his salary, \$8 a month, and this is the highest salary that up to this time has been paid police privates.

Section 5 of the general allotment act, approved February 8, 1887, (24 Stat., 390), contains, among other provisions, the following :

* * * Hereafter in the employment of Indian police or any other employés in the public service among any of the Indian tribes or bands affected by this act, and where Indians can perform the duties required, those Indians who have availed themselves of the provisions of this act and become citizens of the United States shall be preferred.

The Indians who have availed themselves of the provisions of the allotment act above referred to are usually the most energetic and progressive members of their tribes. To follow the requirements of sec-

tion 5 and appoint them to positions where they would be compelled to devote themselves to the Government service, to the neglect of their families and farms, for the pittance of \$8 to \$10 per month, could but work hardship to such Indians and retard their advancement in agriculture and other civilized pursuits.

On the other hand, those who will not accept allotments in severalty, and who are willing to serve on the police force for the small compensation and the honor connected with the position, are in too many instances unfit for policemen. This fact was so fully recognized by the Osage Nation that, during the fiscal year 1889, their council voted an appropriation of \$2,800 of their own funds to be expended in the employment of seven detectives, at a compensation of \$400 per annum each.

In order to comply with the existing law, to secure the best possible service, and at the same time to avoid working injury to Indians who are striving to advance, I earnestly recommend that the compensation of Indian police for the fiscal year 1891 be fixed at the following rates per month: Captains, \$25; lieutenants, \$20; sergeants, \$17, and privates, \$13.

The number of police now authorized, viz, 70 officers and 700 privates, can not well be reduced without injury to the service, and I further recommend that the total number authorized remain unchanged, but that they be apportioned as follows: 30 captains, 40 lieutenants, 60 sergeants, and 640 privates.

INTERPRETERS FOR INDIANS.

Section 2089 of the United States Revised Statutes is as follows:

At the discretion of the President, all disbursements of moneys, whether for annuities or otherwise, to fulfill treaty stipulations with individual Indians or Indian tribes, shall be made in person by the superintendents of Indian affairs, where superintendencies exist, to all Indians or tribes within the limits of their respective superintendencies, in the presence of the local agents and interpreters, who shall witness the same, under such regulations as the Secretary of the Interior may direct.

Under the provisions of this section the Treasury Department prior to 1881 held that all payments to Indians must be witnessed by interpreters, whether such payments were cash annuities, or were made for transportation, or for supplies furnished, or for services performed, or for any other purpose, and without regard to the amount paid. Agents found it difficult to have an interpreter always present to witness small payments, and in 1881, at the request of this office, the construction of the law was modified by the Treasury so as to allow the payment to an Indian, without its being witnessed by an interpreter, of a sum not exceeding \$10, provided it was clearly shown that the presence of an interpreter could not be had without considerable difficulty and an unreasonable delay.

This ruling, even with its modifications, it has been difficult to apply, especially at agencies where the Indians are well advanced in civilization, and many speak and write English. Moreover, agents report that the salary allowed interpreters, \$300 per annum, is so limited that men of even very moderate education will not accept the position; hence Indians but poorly qualified must often be employed as interpreters. Some of them though able to speak are unable to write English, and often can not even sign their names. Therefore among the accounts of agents are found vouchers which are signed by Indians but are witnessed by interpreters who sign by mark, the certificates of the interpreters being to the effect that they have thoroughly explained to the Indians the

nature of the transaction represented by the vouchers and know that they fully understand the same, the purpose for which they signed their names, and the amounts received for! This, of course, is not the slightest protection either to the Indians or to the Government.

In the spring of 1888 an army officer who was acting as Indian agent called the attention of this office, in the following words, to the embarrassment which he experienced from this interpretation of the law:

* * * This requirement is manifestly made on the presumption that the Indians can not speak or learn to speak English. Now, all the working Indians here speak English, and for practical purposes they speak it and understand it quite as well as I do. * * * There is no sense in calling in an interpreter to interpret a transaction that is perfectly understood in English, and is witnessed, as all my payments are, by several people, and although I show in every case that the payees speak and understand English, the examiners have suspended all the vouchers on which I have made such payments unaccompanied by the certificate of an interpreter, which in all cases that I have seen is a purely perfunctory transaction, and should be abolished when the circumstances permit it.

The attention of the Treasury was again called to this matter by letter of April 3, 1888, and the Second Comptroller replied April 18, 1888, to the effect that in his opinion the President and Secretary of the Interior were authorized by law to direct the manner in which payments to Indians should be made. Under this ruling, and in view of the facts above set forth, I shall from time to time recommend the discontinuance of interpreters at agencies where the Indians have made sufficient progress in mastering the English language to warrant such action.

Meantime I trust that the efficiency of the interpreter service may be generally improved by the employment of students returned from training schools, who will be competent for such duty.

INDIAN TRADERS.

No branch of the Indians' preparation for citizenship has perhaps received less attention than that which pertains to commerce. "Trading" has been monopolized by white men, and no systematic effort has been attempted to train the Indians to commercial habits.

With a view to ascertaining the present condition of the system of trading, the following instructions have been issued to special agents:

Hereafter when inspecting Indian agencies you will please give special attention to the subject of Indian traderships. You will carefully ascertain and report as to the general reputation of each trader for honesty, fair dealing with the Indians, and good influence among them. You will also report specifically as to the quality and sufficiency of the stock of goods kept by the trader; whether he deals in articles whose sale is injurious to the Indians; whether the prices charged are reasonable; whether the schedule of prices is displayed so that the Indians can be well informed thereof; whether the trader sells intoxicating liquor under any guise, or arms or fixed ammunition, or trades with the Indians for goods furnished them by the Government, or in any way violates the letter or spirit of sections 23, 31, and 33, relating to the above; whether his store is kept open on Sunday; whether it is used as a resort for loafers; whether gambling, demoralizing dances, or any other practice or amusements hurtful to the Indians are allowed upon the premises, and, in general, whether the trader and his employes are sober, respectable people whose conduct and example among the Indians will tend to elevate the Indians morally and socially instead of the reverse.

Inclosed please find copy of the "Laws and regulations relating to trade with Indian tribes," published by this Office, from which you will see what the Office expects from an Indian trader, and be able to judge and report to what extent, if any, a trader fails to meet the requirements.

GRAZING UPON INDIAN LANDS.

In the annual report of this Office for 1885, attention was invited to the perplexing status of the question of cattle-grazing upon Indian reservations existing under the opinion of the Attorney-General of July 21, 1885, wherein it is held that Indians are not legally capable of leasing their reservation lands for grazing purposes, and that neither the Secretary of the Interior nor the President has authority to approve such leases except they be authorized to do so by special provisions of law. The urgent necessity for some legislation by Congress authorizing the grazing of Indian lands under proper restrictions was thoroughly emphasized in that report, and also in each succeeding annual report of this Office; but so far, Congress has not seen fit to enact the necessary legislation.

In order to overcome in a measure this difficulty, and to enable the Indians to receive some benefit from the spontaneous products of their lands, the Department has authorized several tribes to take a limited number of cattle to herd and graze upon the reservations at a stipulated price to be paid by the owners of the cattle to the United States Indian agent for the benefit of the tribe.

The agreement submitted to and accepted by the Indians, and now in force upon several reservations, is substantially as follows:

(1) The general question of permitting cattle-grazing upon the unoccupied lands of the reservation to be submitted to the Indians for their consent or rejection.

(2) In the event of their consent, the agent to be authorized to permit a limited number of cattle to be grazed on the reservation conditionally, as follows:

(a) That such a permit be given only to actual settlers residing in the neighborhood of the reservation, and for their own cattle.

(b) That a fair and just compensation shall be paid to the agent by the owners of the cattle for the use and benefit of the Indians.

(c) That all moneys received for grazing shall be deposited by the agent in the Treasury of the United States, in accordance with the act of March 3, 1883 (22 Stat., 590), and thereafter to be used for the benefit of the respective tribes, as provided in the act of March 2, 1887 (24 Stat., 463).

(d) That no exclusive privilege of grazing lands be granted on the reservation, nor any act done looking to a lease or agreement for a lease of any particular portion of said lands.

(e) That all permits shall be for the grazing season only, and subject to revocation at any time by the Department.

(f) That no responsibility for the cattle shall in any way attach to the United States or any of its agents, nor shall any permit be given which shall retard or interfere with the agricultural or other industrial pursuits of the Indians, individually or collectively, nor shall the stock belonging to the Indians be deprived of ample pasturage. Neither shall the owners of cattle or sheep erect any improvements whatsoever on the reservation, nor use the lands for any other purpose than for the grazing of their own stock, under penalty of the immediate revocation of the permit.

(g) That subject to the above specified conditions, the whole matter shall be controlled by the agent, who shall see that good order prevails upon the reservation, and in case of any infraction or violation of said condition shall report the names of the offenders for the immediate revocation of their permit and the removal of their stock.

(h) That where herders may be needed to care for the stock, Indians shall be employed as far as practicable, and no white person be permitted to come upon the reservation except temporarily, at such times as in the judgment of the agent it may be necessary for him to look after the condition of his stock—the necessity for such visits and the circumstances attending them to be reported to this office.

Several Indian tribes have refused to take cattle under these conditions, for the alleged reason that the grazing money was not to be paid to them directly, but was to be deposited in the Treasury by the agent, and afterwards expended for their benefit in a manner discretionary with the Secretary of the Interior.

The proper adjustment of this grazing question is one of the most urgent matters I have to present to the Department, and I desire to renew the recommendations made by this office upon the subject in the annual report of 1885 and in each succeeding report. There are vast areas of unoccupied land within many reservations upon which spontaneous crops of luxuriant grass annually grow up, and decay or are destroyed by fire, bringing but little substantial benefit to the soil and no financial return to the Indians. If Congress by suitable legislation would provide for the leasing of the unoccupied portions of these reservations, what is now wasted might be utilized and the proceeds therefrom might be applied to the amelioration of the condition of the Indians. It is earnestly hoped that Congress will provide the necessary legislation at the next session.

RAILROADS.

Since the date of the last annual report of this office, the following grants of right of way to railroads through Indian reservations have been made by Congress:

CROW RESERVATION, MONT.

Big Horn Southern Railroad.—By act of February 12, 1889 (25 Stats. 660 and page 428 of this report), the Big Horn Southern Railroad Company was granted the right of way through the Crow Reservation for the construction, operation, and maintenance of its railroad, telegraph, and telephone line, beginning at a point on the Northern Pacific Railroad, in the vicinity of the mouth of the Big Horn River, in Yellowstone County; thence by the most practicable route up said Big Horn River to or near the mouth of the Little Big Horn River; thence up said Little Big Horn River to or near the mouth of Owl Creek; thence up said Creek to and across the southern boundary line of said reservation.

The sixth section of the act provides "that said railroad company shall have the right to survey and locate its road immediately after the passage of this act." Under date of March 18, 1889, the Department authorized the railroad company to proceed with the survey, with the understanding that no work in the construction of the road should be begun or attempted upon the reservation until further orders from the Department. Five maps (in duplicate) of definite location, covering a distance of 89.8 miles, were filed in the Department, with letter dated September 12, 1889, and referred to this office September 18, 1889.

FOND DU LAC RESERVATION, MINN.

Duluth and Winnipeg Railway.—By act of October 17, 1888 (25 Stat., 558), the Duluth and Winnipeg Railway Company is granted the right

of way for the extension of its road through the Fond du Lac Reservation, in Minnesota.*

In apparent disregard of certain conditions imposed by the act the company began the building of its road on the reservation and took therefrom timber needed in construction. By direction of the Department (January 23, 1889), the Indian agent in charge of the reservation was instructed to prevent such trespass, and on the following day he reported by telegraph that the railroad company had ceased work. Subsequently Agent Leaby, who in the mean time had succeeded Agent Gregory, reported that about 20 miles of the road had been constructed in advance of the fulfillment of any of the several conditions imposed by the enabling act, and that the Indians desired to know what arrangements had been made by the railroad company to pay them for the right of way. On receipt of that report this office (on August 26, 1889) instructed the agent to prevent the railroad company from resuming the work of construction on the reservation until the pre-requisite conditions of the act were fully complied with. The attention of the president of the railway company was also called to the requirements of the enabling act, and he was given full instructions as to the proper course for him to pursue in order to secure the benefits of the grant.

On September 6, 1889, W. A. Barr, esq., attorney and secretary of said company, filed in the Department a map in duplicate, showing the definite location of the line of the road through said reservation, together with depot and station grounds made from actual survey, with request that upon approval of the same a council of the Indians be called to agree upon and fix the compensation to be paid for the right of way, etc. Said map having been referred to this office for report, it was returned to the Department September 13, 1889, with recommendation for its approval subject to the conditions imposed by the enabling act. Further recommendation was made in regard to obtaining the consent of the Indians to the amount of compensation they would accept from the railway company for the right of way, etc. On September 23 following the Department returned the map to this office approved, and transmitted an order from the President prescribing the manner for obtaining the required consent of the Indians, and on October 1 the agent at the La Pointe Agency was directed to convene a council of the Indians for that purpose agreeably with the President's order.

GREAT SIOUX RESERVATION, IN DAKOTA.

Chicago, Milwaukee and St. Paul Railway.—Dakota Central Railway.—The 16th section of the act of March 2, 1889, entitled "An act to divide a portion of the reservation of the Sioux Nation of Indians in Dakota into separate reservations and to secure the relinquishment of the Indian title to the remainder, and for other purposes" (25 Stat., 888), provides that the Chicago, Milwaukee and St. Paul Railroad Company and the Dakota Central Railroad Company shall have, respectively, the right to take and use prior to any white person and to any corporation, the right of way, etc., provided for in certain agreements heretofore made by said railroad companies, respectively, with the Sioux Indians, which agreements have been referred to in previous annual reports of this office. Sundry conditions are imposed, for the particulars of which reference is invited to the act itself which will be found on page 449 of this report. The agreements referred to may be found in Senate Ex.

* This act was passed prior to the date of the last annual report, but information thereof had not, at that time, reached this office.

Doc. No. 20, Forty-eighth Congress, first session, and House Ex. Doc. No. 11, Forty-eighth Congress, first session.

The act of March 2, 1889, can not take effect until Congress shall have ratified the agreement recently negotiated with the Sioux under section 3 of the Indian appropriation act, approved March 2, 1889 (25 Stat., 980).

Forest City and Watertown Railroad Company.—The act of March 2, 1889 (25 Stat., 852 and page 446 of this report), grants the right of way to the Forest City and Watertown Railroad Company through the Sioux Indian Reservation, in Dakota, beginning at a point on the west bank of the Missouri River in Dewey County, Dak., opposite Forest City, Potter County, said Territory, running thence by the most practicable route in a southwesterly course between the Cheyenne and Moreau Rivers to the city of Deadwood, Dak.

Authority was given the railroad company, April 11 last, to proceed with the survey of its line through the reservation, and at last accounts the survey was in progress. The maps have not yet been filed, nor has any action been taken to procure the required consent of the Indians.

INDIAN TERRITORY.

Choctaw Coal and Railway Company.—By the act of February 13, 1889 (25 Stat., 669 and page 429 of this report), the first section of the act of February 13, 1889 (25 Stat., 25), granting the right of way to the Choctaw Coal and Railway Company through the Indian Territory, is amended to read as follows:

That the Choctaw Coal and Railway Company, a corporation created under and by virtue of the laws of the State of Minnesota, be, and the same is hereby, invested and empowered with the right of locating, constructing, owning, equipping, operating, using, and maintaining a railway and telegraph and telephone line through the Indian Territory, beginning at a point on the Red River (the southern boundary line) at the bluff known as Rocky Cliff, in the Indian Territory, and running thence by the most feasible and practicable route through the said Indian Territory to a point on the east boundary line immediately contiguous to the west boundary line of the State of Arkansas; also a branch line of railway to be constructed from the most suitable point on said main line for obtaining a feasible and practicable route in a westerly or northwesterly direction to the leased coal veins of said Choctaw Coal and Railway Company, in Tolucksey County, Choctaw Nation, and thence by the most feasible and practicable route to an intersection with the Atchison, Topeka and Santa Fé Railway, at the most convenient point between Halifax Station and Ear Creek, otherwise known as the North Fork of the Canadian River, with the right to construct, use, and maintain such tracks, turn-outs, branches, and sidings and extensions as said company may deem it in their interest to construct along and upon the right of way and depot grounds herein provided for.

Under date of July 5, 1889, Hon. T. C. Fletcher, attorney for said company, filed four separate maps (in duplicate) of definite location of said company's road; also a copy of the articles of incorporation and a list of the officers of the company, both duly certified by the secretary of the company.

On July 11, 1889, the Department approved map No. 1, being one of the four mentioned above, representing a section of 25 miles of the located line of said railroad from Sec. 33, T. 12 N., R. 3 W., to Sec. 4, T. 11 N., R. 2 E. Maps 2 and 3 were transmitted to the Commissioner of the General Land Office for the action of that office, for the reason that that portion of the line covered by said maps (2 and 3) does not pass through any Indian lands. Map No. 4 was returned to Mr. Fletcher for correction.—(Department letter to this office of July 11, 1889.)

On August 31, 1889, the Department approved map No. 9, indicating a section of 25 miles from "near station place on Deer Creek" to "John

Adams Prairie." Said map does not connect with maps previously filed (Nos. 1, 2, 3, and 4), but covers a portion of the right of way 100 miles east of the section covered by map No. 4, returned for correction, as before stated. In filing this map (No. 9), the company's manager observes that the company "is constructing its lines from the crossings of its different railway connections east and west, in order that it may secure material for said construction at both ends of its line, and thus facilitate the rapid completion of the same," and that when map No. 4 shall have been corrected, and maps 5, 6, 7, and 8 filed, "there will be a continued and connected line."

Fort Smith, Paris and Dardanelle Railway.—The act of February 26, 1889 (25 Stat., 745, and page 435 of this report), grants the right of way to the Fort Smith, Paris and Dardanelle Railway Company to construct and operate a railroad, telegraph, and telephone line from Fort Smith, Ark., through the Indian Territory, to or near Baxter Springs, in the State of Kansas.

The same act repeals the act of July 6, 1886 (24 Stat., 124), authorizing the Kansas City, Fort Scott and Gulf Railway Company to construct and operate a railway through the Indian Territory.

No maps of definite location have been filed by the Fort Smith, Paris and Dardanelle Railway Company under the above grant, although the company is authorized to survey and locate its line "immediately after the passage of this act."

RED PIPESTONE INDIAN RESERVATION IN MINNESOTA.

Cedar Rapids, Iowa Falls and Northwestern Railway.—The act of March 2, 1889 (25 Stat., 1012, and page 463 of this report), directs the appraisement of the strip of land, 100 feet in width, now occupied by the Cedar Rapids, Iowa Falls and Northwestern Railway Company, over and across the Red Pipestone Indian Reservation in the State of Minnesota, as well as the damage to the remainder of the lands of said reservation caused by such railroad occupation, and provides that said railroad company "shall be entitled to enter and purchase the aforesaid strip of land of the width aforesaid, now occupied by its road-bed, by paying the amount so assessed as the value thereof, together with the amount of damages assessed as aforesaid."

The third section of the act provides that the act shall take effect and be in force and authorize the entry and sale of said right of way so soon as, and not until, a majority of the adult male Indians of the Yankton tribe of Sioux Indians shall consent to the entry and sale of such right of way, etc.

The lands included in said right of way were appraised in May last by a commission appointed for that purpose at \$1,060, and the damages resulting from the construction of the road at \$680; total, \$1,740.

Subsequently a commission was appointed to procure the required consent of the Indians. As already stated in another portion of this report, although the Indians declined to assent to certain other provisions of the act, they consented and agreed to the entry and sale of the tract embraced within the right of way.

WHITE EARTH AND LEECH LAKE RESERVATIONS, IN MINNESOTA.

Moorhead, Leech Lake, Duluth and Northern Railway.—The act of January 16, 1889 (25 Stat., 647, and page 425 of this report), grants to the Moorhead, Leech Lake, Duluth and Northern Railway Company the

right of way through the White Earth Indian Reservation in the State of Minnesota. No steps appear to have been taken by the railroad company to secure the benefits of said act. No maps have been filed nor survey made.

St. Paul, Minneapolis and Manitoba Railway.—The act of February 25, 1889 (25 Stat., 696, and page 435 of this report), grants to the St. Paul, Minneapolis and Manitoba Railway Company the right of way through the White Earth Reservation. No steps appear to have been taken by said railway company to avail itself of the grant. No maps of definite location have been filed nor any survey made so far as is known to this office.

Duluth and Winnipeg Railway.—The act of March 2, 1889 (25 Stat., 1010, and page 462 of this report), grants to the Duluth and Winnipeg Railway Company the right of way for the extension of its railroad through the Leech Lake and White Earth Indian Reservations in the State of Minnesota.

Thus far no steps appear to have been taken by the railroad company to avail itself of the benefits of said grant so far as it relates to the two reservations named. No maps of definite location have been filed nor any survey made. See mention of this road under head of "Fond du Lac Reservation."

YANKTON RESERVATION IN DAKOTA.

Yankton and Missouri Valley Railway Company.—The act of February 23, 1889 (25 Stat., 684, and page 430 of this report), grants the right of way to the Yankton and Missouri Valley Railway Company through the Yankton Reservation in Dakota Territory. No steps have been taken by the railroad company to secure the benefits of said grant. No maps of definite location have been filed nor any survey made.

GRANTS REFERRED TO IN LAST ANNUAL REPORT.

Bad River Reserve, Wisconsin.—No settlement has been made with the Indians of this reservation for the right of way taken by the Duluth, Superior and Michigan Railway. The agent reports that while the Indians are anxious for a settlement they persist in their unreasonable demands regarding the measure of compensation to be paid to them.

Boise Fort Reserve and Red Lake Chippewa unceded lands, Minnesota.—The Duluth, Rainy Lake River and Southwestern Railway Company have made application for another council with the Indians of the Boise Fort Reservation, for the purpose of gaining their consent to the construction of its road through their reservation, under the provisions of the act of April 24, 1888 (25 Stat., 90). The Indians having, on August 2, 1888, refused to give their consent to the right of way, the department decided, June 7, 1889, that no steps for the further submission of the matter to the Indians should be taken.

Cœur d'Aléne Reserve, Idaho.—An agreement was entered into with the Cœur d'Aléne Indians, in January last, whereby they agreed to accept as compensation to the tribe for right of way granted to the Washington and Idaho Railroad Company (act May 30, 1888, 25 Stat., 180), the sum of \$6,066.18, being at the rate of \$6 per acre for the land included in the right of way. The one individual member of the tribe who was damaged by the construction of the road agreed to accept the sum of \$295.50 in full for damages sustained by him by reason of the construction of the road through his improved tract. The Department approved said agreements January 19, 1889, and fixed the

compensation as required by the right of way act in the sums above mentioned. The money was paid by the railroad company, and in pursuance of Department directions that the same should be distributed to the tribe per capita in cash, a check for the full amount was sent to Agent Cole, August 5, 1889—\$6,066.18 to be distributed to the tribe, and \$295.50 to be paid "Tu-tu" for individual damages.

Crow Reserve, Mont.—As reported in office letter of December 31, 1888, the Crow Indians, on December 12, 1888, in council assembled, refused to give their consent to the right of way through their reservation for the Billings, Clark's Fork and Cooke City Railroad, granted by act of June 4, 1888 (25 Stat., 167). The third section of the act provides:

That the President of the United States may, at his discretion, require that the consent of the Indians to said right of way shall be obtained by said railroad company, in such manner as he may prescribe, before any right under this act shall accrue to said company.

The President prescribed rules for obtaining such consent June 30, 1888. The subject was presented to the Indians agreeably with the President's order, and after having had ample time for deliberation they refused almost unanimously to give their consent to the right of way. This action on the part of the Indians renders the grant of no effect.

Fort Hall Reserve.—Amended maps and plats of the definite location of the right of way of the Utah and Northern Railway, act September 1, 1888 (25 Stat., 452), covering all the lands desired by said railway for right of way and for other railway purposes, were approved by the Department April 8, 1889, and the sum of \$7,621.04 has been paid by the railway company for the right of way. Said sum is in full payment, at \$8 per acre, for all the land taken by the railway company under the act aforesaid, except 149.94 acres taken in addition to the right of way within the town site of Pocatello, for which latter the railway company is required by the terms of the act to pay \$8 per acre, and also to pay an additional sum equal to the average appraisal of each acre of town lots outside of the portion so taken. Appraisers have been appointed to make the required appraisement, and when their report shall have been received and approved the railway company will be required to make the additional payment.

Indian Territory.—Neither the Fort Smith and El Paso Railway Company, the Kansas City and Pacific Railroad Company, nor the Paris, Choctaw and Little Rock Railway Company, appear to have taken any steps to avail themselves of the right of way granted to them, respectively, through the Indian Territory (25 Stat., 162, 140, 205).

Additional maps of the definite location of the Kansas and Arkansas Valley Railway, covering the fourth and fifth sections of 25 miles each of the main line, were approved by the Department on January 18 and January 21, 1889, respectively; maps of the first and fractional second sections of the branch line were also approved on the latter date. Nine plats of station grounds desired along the line, which were filed by the company, were returned for certain corrections, which were indicated in the letter of transmittal. On September 1, 1888, a draft for \$4,148 was tendered by this company, and accepted as payment for right of way.

A map of definite location of the third section of 25 miles of the Denison and Washita Railway was approved by the Department on January 21, 1889, and under date of August 17, last, the company was called upon to make full payment of arrears due for right of way upon the line already constructed, a check for \$500 being the only payment

for right of way which has been made by the company to present date.

Maps of definite location of the second and third sections of 25 miles each of the Chicago, Kansas and Nebraska Railway, were approved by the Department on March 30 and April 24, 1889, respectively. The Cherokee Council having protested against the compensation of \$50 per mile for right of way provided in the act, a board of referees was appointed, as therein provided, consisting of James N. Beacon, esq., of Smith Centre, Kans.; Samuel J. Crawford, esq., of Topeka, Kans., and George L. Douglas, esq., of Wichita, Kans. This board has not yet submitted its award.

It was stated in the last annual report that seventeen plats of station grounds of the Southern Kansas Railway (act July 4, 1884; 22 Stat., 73) were approved by the Department October 25, 1887. Another plat, that of the station grounds at Purcell, in the Chickasaw district, which was withheld for certain explanations in regard thereto by the railway company, was approved by the Department November 28, 1887.

On November 5, 1888, Messrs. Britton & Gray, attorneys for said railway company, filed in the Department a plat of the company's station grounds at Chilocco, on mile 1 of the main line of the road, which plat having been referred to this office was returned to the Department December 7, 1888, for the reason that the width of the strip selected for such station grounds, as shown upon the plat, was greater on the east side of the track than the right-of-way grant allows. In returning the plat this office recommended that it be returned to Messrs. Britton & Gray for proper correction. No corrected map has as yet been presented for approval and nothing has been heard of the matter since.

On January 9, 1889, the Department approved four plats of tracts selected for station grounds on the branch line of said Southern Kansas Railway Company, at Warren, on miles 8 and 9 of the first section; at Warwick, on miles 68 and 69 of the seventh section; at Gage, on miles 96 and 97 of the tenth section; at Goodwin, on miles 113 and 114 of the twelfth section.

On June 27, 1889, Messrs. Britton & Gray filed four additional plats showing grounds desired by the said Southern Kansas Railway Company for station purposes. Three of them, viz, "Orlando," on mile 65, "Seward," on mile 93, and "Verbeck," on mile 126, falling within the Oklahoma country, were returned to the Department by this office August 26, 1889, for reference to the General Land Office, the lands of the Oklahoma country being now within the jurisdiction of that office. The remaining plat, designated as "Perry" station, on mile 49 of the main line, in section 32, township 22 north, range 1 east, Indian meridian, was returned to the Department at the same time, with the recommendation that it be approved, subject to any right of individual Indians lawfully existing in or to the tract of ground so selected at the date of the filing of the plat. The approval of said plat is withheld awaiting certain information desired by the Department which the Indian agent at the Ponca, Pawnee, etc., agency has been called upon to furnish.

Lac du Flambeau Reservation, Wis.—The Indians of the Lac du Flambeau Reservation, in Wisconsin, having assented to the provisions of the act of June 4, 1888 (25 Stat., 169), granting to the Milwaukee, Lake Shore and Western Railway Company the right of way through their reservation, and having agreed to the amount of compensation they would accept for such right of way, the Department on May 3, 1889, fixed the amount of such compensation in the sum agreed upon by the

Indians, viz, \$1,638.54. The amount has been collected from the railway company and placed in the Treasury to the credit of the Commissioner of Indian Affairs.

Nez Percé Reservation, Idaho.—There is nothing additional to report in regard to the Oregon Railway and Navigation Company's right of way through the Nez Percé Reservation, in Idaho, act of July 28, 1888 (25 Stat., 349). As stated in the last annual report, authority was granted the company (August 10, 1888) to make preliminary surveys. No maps have been filed for approval nor steps taken to obtain the consent of the Indians to the right of way, which consent, by the terms of the act, is made a condition of the grant.

Puyallup Reservation, Wash.—The Indians of the Puyallup Reservation, in Washington Territory, refused to give their consent to the right of way for the Puyallup Valley Railway Company through said reservation, provided for in the act of July 24, 1888 (25 Stat., 350). The second section of the act requires—

That the consent of the Indians to said right of way upon the said Puyallup Indian Reservation shall be obtained in such manner as the President of the United States may prescribe, before any right under this act shall accrue to said company.

The President by his order, dated February 2, 1889, prescribed the manner in which the required consent should be obtained, and the subject was presented to the Indians in open council by their agent, as directed by the President, on March 12 following. After deliberating upon the question for several days they decided to refuse their consent by a vote of seventy-three against to forty-one in favor of the proposition. The subject was fully reported to the Department in office letter of June 11, 1889. This action on the part of the Indians renders the right-of-way grant inoperative.

Siletz Reservation, Oregon.—No steps appear to have been taken by the Newport and King's Valley Railroad Company to avail itself of the grant of right of way through the Siletz Reservation, in Oregon, as provided in the act of July 24, 1888 (25 Stat., 347). No maps have been filed, no surveys made, nor has any action been taken to obtain the consent of the Indians as required by the act.

Uintah and Uncompahgre Reservation, Utah.—The Utah Midland Railway Company has not as yet filed maps of the location of its line through the Uintah and Uncompahgre Reservation, in Utah, under its right of way grant, act of March 3, 1887 (24 Stat., 548), reference to which was made in the last two annual reports of this office. No information has been received as to whether the surveys have been completed.

Devil's Lake Reservation, Dak.—In the last annual report it was stated that a bill had been prepared in this office and was then pending in the Senate (No. 1228) granting the right of way to the Jamestown and Northern Railroad Company through the Devil's Lake Reservation, in Dakota, upon the terms and conditions named in an agreement made by that company with the Devil's Lake Sioux in 1883; that the road had been constructed and in operation since 1885, and that the Indians were urgent in their demands that the compensation provided for in said agreement should be paid to them. No final action has been taken by Congress in the matter, and the delay is causing much dissatisfaction among the Indians. It is to be hoped that the necessary legislation will be reached at an early day.

Lake Traverse Reservation, Dak.—No final action appears to have been taken by Congress upon the bill to ratify an agreement made in 1884

with the Sisseton and Wahpeton bands of Sioux forright of way through the Lake Traverse Reserve, in Dakota, for the Chicago, Milwaukee and St. Paul Railway, to which reference was made in the last annual report. As has been before urged, it is very desirable that this agreement should be ratified.

Red Pipestone Reservation, Minn.—The bill (H. R. 10766) granting the right of way to the Cedar Rapids, Iowa Falls and Northwestern Railway through the Red Pipestone Reservation, in Minnesota, to which reference was made in the last annual report of this office, did not become a law; but other legislation was substituted therefor, mention of which has already been made in another part of this report, and the action taken thereunder fully set forth.

Walker River Reservation, Nev.—No final action has been taken by Congress upon the bill submitted to that body for the fourth time to ratify a certain agreement with the Indians of the Walker River Reservation, in Nevada, for the right of way to the Carson and Colorado Railroad Company through said reservation, to which reference was made in the last annual report.

Yakima Reservation, Wash.—No final action has yet been taken by Congress upon the bill to accept and ratify an agreement made January 13, 1885, with the Indians of the Yakima Reservation, for the relinquishment of their title to so much of their reserve as is required for the use of the Northern Pacific Railroad, and to make the necessary appropriations for carrying the same into effect. This bill has twice been submitted to Congress, and, as was stated in the annual report of last year, the Indians are constantly urging a settlement under their agreement.

DEPREDACTION CLAIMS.

A clause in the act of March 3, 1885 (23 Stat., page 376), "making appropriations for the current and contingent expenses of the Indian Department * * * and for other purposes," appropriated \$10,000 "for the investigation of certain Indian depredation claims," and provided that "in the expenditure of said sum the Secretary of the Interior should cause a complete list of all claims heretofore filed in the Interior Department * * * to be made and presented to Congress at its next regular session." The Secretary was further authorized by said act "to cause such additional investigation to be made and such further testimony to be taken as he might deem necessary to enable him to determine the kind and value of the property damaged or destroyed."

For the purpose of carrying out the provisions of the above act, a division was created in the Indian Bureau in 1885, known as the "Depredations Division," though it did not receive that designation officially until January 1, 1889. The number of office employes in this division has varied from two to six, and there are now four, viz, the chief clerk, two clerks or examiners, and a typewriter. For the purpose of causing "additional investigation to be made," special agents have been appointed and sent to the localities where the alleged depredations are said to have been committed, to take such additional testimony as is obtainable and report the claim to this office with their conclusions thereon. These special agents receive a compensation of \$8 for every day actually employed, and their necessary expenses, exclusive of subsistence; the number employed at no time has exceeded six.

The construction placed upon the aforesaid act by the Indian Bureau, and concurred in by the Department of the Interior, precluded from

investigation on their merits all claims barred by the following clause of the seventeenth section of the act of June 30, 1834 (4 Stat., 731):

Unless such claim shall be presented within three years after the commission of the injury the same shall be barred.

Therefore such claims were reported to Congress as barred and not entitled to investigation. After a number of them had been so reported, a clause in the act of May 15, 1886 (24 Stat., 44), extended the scope of investigation by saying: "And the investigation and report shall include claims, if any, barred by statute, such fact to be stated in the report." This necessitated a return from Congress of all those claims which, without an investigation on their merits, had been reported as barred, and thus rendered useless much of the work which had been done up to that time.

The following tables show the number of claims on hand, received and disposed of since June 30, 1885.

TABLE 5.—Showing number of depredation claims on hand and received since June 30, 1885.

	No. of claims.	Amount involved.
On file June 30, 1885	2,939	\$14,879,088
Filed during fiscal year ending June 30, 1886	168	674,939
Filed during fiscal year ending June 30, 1887	109	382,514
Filed during fiscal year ending June 30, 1888	769	1,907,685
Filed during fiscal year ending June 30, 1889	509	1,383,104
Total	5,494	19,227,330

TABLE 6.—Showing number of depredation claims disposed of since June 30, 1885.

	No. of claims.	Amount involved.	Amount recommended.
Paid or adjudicated so that they can not be further considered by this office	54	\$218,190.10	.....
Reported to Congress January 1, 1887	305	1,006,021.97	\$278,323.88
Reported to Congress January 1, 1888	399	984,433.66	330,728.42
Reported to Congress January 1, 1889	229	1,070,003.37	377,105.41
Total	987	3,388,649.10	992,157.71
Pending in Indian Office June 30, 1889	4,507	15,888,680.90	.....

In determining what claims were subject to investigation under the act of March 3, 1835, as amended by the act of May 15, 1886, the opinion of the Assistant Attorney-General for the Interior Department was obtained, under date of August 23, 1886, which decides that all claims in favor of citizens of the United States (*i. e.*, those who were citizens at the date of the alleged depredation) for losses by Indians who were in treaty relations at the time of the loss, which were on file March 3, 1885, are subject to investigation, whether the same were filed within three years from the date of the injury complained of or not; also that all such claims for depredations committed since December 1, 1873, although filed since March 3, 1885, are also subject to investigation, for the reason that the three-year limitation clause of the seventeenth section of the act of June 30, 1834, which acted as a bar, was repealed when the Revised Statutes went into effect December 1, 1873, that clause not being included in the Revised Statutes (Sec. 2156).

The number of claims subject to investigation has been increased by a recent decision which fixes December 1, 1870, three years prior to the repeal of the limitation clause, instead of December 1, 1873, the date of the repeal, as the time subsequent to which depredation claims subject to examination may date.

Under these decisions, out of the 4,507 claims above noted as pending in this office, 2,333 claims, involving about \$5,361,875, are subject to investigation, of which number 447, amounting to \$1,745,398.47, were filed since March 5, 1885, but being for depredations committed since December 1, 1870, are not barred. This leaves 2,174 claims, involving a total amount of about \$10,627,724.53, which from various causes can not be investigated under above acts. Of these, 800 claims, involving \$5,145,965.48, are for various causes not in condition for present consideration, but their defects are, in most instances, curable. Some are not supported by the proof required by the Department rules of July 13, 1872; a few are duplicate filings of the same claim; others do not charge any particular tribe with the depredation complained of, and hence the office can not determine their status; and in many others the records show that the papers have been sent to Congress, or to some Indian agent for submission to the Indians charged, or have been withdrawn by the claimants or their attorneys and never returned, so that there is no foundation upon which an investigation of them can be made. The remaining claims not subject to examination by this office, under the operations of the laws now in force, are as follows: 1,010 claims, amounting to \$2,994,724.53, filed since March 3, 1885, but being for depredations committed prior to December 1, 1870, or more than three years prior to the repeal of the limitation clause of the act of June 30, 1834 (4 Stat., 731); 166, amounting to \$915,216.15, being for depredations committed by Indians not in treaty relations with the United States; 179, amounting to \$1,532,735.27, being claims of Indians against whites or other Indians; and 19, amounting to \$37,083.10, being claims of persons not citizens of the United States at the dates of the alleged depredations.

A list of those claims which are supposed to have been sent from time to time to the various Indian agents has lately been prepared and a copy sent to each agency with a request that a search be made for the same, and, if found, that they be returned to this office. A letter has also been addressed to the Clerk of the House of Representatives, and a copy sent to the Secretary of the Senate, asking a return from Congress of all such claims which have been sent to that body with reports from this office as may be subject to further investigation under the provisions of the act before referred to. It is expected that compliance with these requests will very considerably increase the number of claims subject to investigation and report. It may also be said that it is now the policy of the office to notify claimants of any curable defects in their claims so as to give them an opportunity to make such amendments as may be necessary, under the law, to give them vitality. New claims, subject to investigation, are being filed every week, and old ones are being amended so as to come within the requirements—so that the work of the division is fast increasing. The filing, numbering, indexing, and acknowledging receipt of these claims, whether subject to investigation or not, requires considerable work and makes a heavy draft on the time of the small clerical force employed in this division. When the number and amount of the claims now awaiting investigation is observed, the necessity for increased force to do the work becomes apparent.

A commission was appointed under the provisions of the act of February 16, 1863, to investigate and adjudicate the claims of the people of Minnesota for damages sustained by reason of depredations of the Sisseton, Wahpaton, Medawakanton, and Wapapakoota bands of Sioux Indians in 1862, payment to be made out of appropriations contained in that act. Such of these claims as were allowed and paid by the commission are now on file in the office of the Second Auditor of the Treasury, with the accounts of the disbursing officer of the commission. The remainder, 91 in number, were forwarded to the Department of the Interior, 79 of them labeled "Cases in which no proof was submitted, and they were therefore not acted upon," and 12 others, in which the commission reported "There was a hasty submission on insufficient testimony." From the Department they were forwarded to the Senate, March 14, 1868, in answer to a resolution of that body of March 3, 1868, and, without action thereon, were subsequently returned to the Department files. Afterwards, on the 17th September, 1888, they, together with the correspondence thereon, were transmitted to the Indian Bureau "for file and preservation in that office in connection with the records and papers relating to Indian depredation claims, in order that proper reply may be made to the frequent inquiries of claimants as to the condition of their claims."

The 12 cases referred to, however, were never received in this office. The honorable Secretary, in his letter transmitting the 79, states that the 12 were "informally borrowed by a clerk in the Depredations Division;" but as no record of such claims ever having been received in the Indian Office can be found, nor can the claims themselves be found after a most thorough search, the office is forced to conclude that the clerk who "informally borrowed" them never deposited them in the office. As the act providing for this commission also provided for paying such of the claims as the commission might find worthy, and as the 79 claims above referred to were rejected by that commission, they are considered as *res adjudicata*, so far as this office is concerned, and have not been considered as within the scope of the act of March 3, 1885, and hence have not been examined or placed on file in this office.

During the year ending June 30, 1889, 202 claims involving \$881,107 have been reported upon by this office, and on these \$300,660 have been recommended for allowance. During the same period there were filed 891 claims, subject to investigation, involving \$242,316.90, and 420 claims not subject to present consideration, involving \$1,140,788.10, from which it is seen that while 202 claims have been reported and disposed of, so far as this office is concerned, 89 have been added to the list, making a net gain of 113 claims disposed of during this year.

Prior to the passage of the act of March 3, 1885, the work of investigating and reporting on Indian depredation claims was performed in the "Civilization and Education" Division of the office, and, being only an incident of that division, it necessarily received less attention than it would have obtained in a separate division. After the organization of the Depredations Division claims of all kinds then on file were at once turned over to it, while the act just referred to provided for the investigation of certain claims only, and the appropriation could not be lawfully used in investigating any others. Thus, when all sorts of claims not within the purview of the act were placed in this division, its work was materially increased, and its progress in investigating the class of claims provided for was much retarded thereby.

The appropriation of \$10,000 for the investigation of certain claims created no new obligation, neither did it cancel any already existing,

hence claims previously cognizable under the acts of June 30, 1834, February 28, 1859, and May 29, 1872, are still as much subject to investigation and report as they ever were, the only difference being that they can not receive present investigation, as the appropriation under which such work is performed does not provide therefor.

In addition to the embarrassments caused by having to handle so many claims not subject to investigation, there are other drawbacks to a rapid prosecution of the work in hand. Questions involving the right of a claim to present consideration can not, in many instances, be conclusively settled. In a large number of cases there is no reliable record of the date when each claim was filed, as the record of filing frequently has an earlier date than the oldest paper found on file in the case; nor has there been kept a complete list of the various Indian tribes holding treaty relations with the United States, especially of their subdivisions and local names, which occasions much difficulty in determining whether or not the particular Indians charged are bound by treaty. The appropriation for this service is so small, and the work is of such a diversified character, that rapid progress is not attainable with the force employed, the appropriation only warranting the employment of four clerks in the office and five special agents in the field.

The number of the special agents being limited by the appropriation, their territory is necessarily large, so that much of their time is taken up in traveling, and consequently, even with a high degree of rapidity and accuracy, progress commensurate with the importance of the work can not be made. As most of these claims are for losses sustained many years ago, and as the proof to support or impeach them becomes manifestly more difficult to obtain with the passage of time, justice to the claimants and the Government requires that whatever may be done, to be available, should be done while it is yet possible for testimony to be obtained. With the present limited facilities every effort possible is being made to expedite the work, and, with a better understanding of what is necessary on the part of the claimants and their attorneys as to the preparation of their claims, more satisfactory results may be expected.

REDUCTION IN THE NUMBER OF AGENCIES.

Consolidation of Mission Tule River (consolidated) Agency, with Hoopa Valley Agency.—Since 1877 the Hoopa Valley Agency in California has been managed by an officer of the Army, no provision having been made for the pay of an agent. In the last annual estimate made by this office, Congress was requested to make an appropriation for this purpose. Instead of granting the request, Congress, in the act making appropriations for the current and contingent expenses of the Indian Department for the year ending June 30, 1890, directed that the Hoopa Valley Agency should be embraced within the Mission Tule River (consolidated) Agency, but made no provision for any increase of salary at the latter agency.

This change appears to be of doubtful expediency. Under the Hoopa Valley Agency are two reservations 30 miles apart; the Hoopa Valley reserve containing nearly 90,000 acres, the home of about 500 Indians, and the Klamath River reserve containing about 26,000 acres occupied by about 290 Indians. The Hoopa Valley Indians have become practically self-supporting and are making progress towards civilization. By their own labor they are provided with food, clothing, agricultural implements, stock, etc., and from the military post they have received

assistance in transporting produce to market and bringing back supplies, and in obtaining opportunities for paid labor.

The Klamath River Indians depend in a great measure on fishing and lumbering, suffer much from trespassers on their fishing grounds, have easy access to intoxicants, and therefore need to be constantly within reach of an agent who has experience, energy, good sense, and some legal acquirements.

The duties resting on the agent of Mission Tule River (consolidated) Agency before this change would seem to have been sufficiently onerous without adding the care of another agency, for he already had three distinct and widely separated tribes and reservations under his supervision, viz: (1) The Mission Indians, who constitute the Mission Agency proper and number about 3,000. Their numerous reservations, aggregating about 162,000 acres, are all surrounded by white settlers, who have for years trespassed thereon and still continue to do so. An agent should be with them as much as possible in order to look after their rights. (2) The Tule River Indians, who number about 150. Their reservation, containing about 50,000 acres, is located some 150 miles north of the Mission Agency. They are under the immediate care of a farmer, and the agent can spare them but little of his time, which is unfortunate, since they need careful oversight because their reservation is not well adapted to agriculture, and they are obliged to earn a livelihood by working for the surrounding whites, where they are brought in contact with whisky and other demoralizing influences. (3) The Yuma Indians, who number about 975 persons. Their reservation of 50,000 acres is located about 125 miles south of the Mission Agency. They are naturally peaceable and easily managed, but there are no white employés allowed for them, and as the agent can not visit them often they are not improving.

The Hoopa Valley Agency is 900 miles distant from the Mission Agency, and the only practicable route thereto is from Colton to San Francisco, 540 miles; thence by sea to Eureka, 230 miles; thence by ferry to Arcata, 12 miles; thence to north fork of Mad River, by rail, 10 miles; and thence to the agency, 30 miles, by horseback over a pack trail.

It will thus be seen that the agent of the agency, as now organized, will be required to travel long distances each time he visits the various reservations under his charge. Much of his time must necessarily be spent in travel, and the expense of the journeys will be considerable. Moreover he is to be held responsible under his bond for the property at the Hoopa Valley Agency, over which it will be impossible for him to have any personal supervision, and for this risk he is to receive no additional compensation.

The withdrawal of the army officer now in charge at Hoopa Valley will necessitate the appointment of some one to superintend affairs there in the absence of the regular agent, and a properly qualified person can not probably be obtained for less than \$1,200 per annum. This will be an entirely new expenditure. In view of these facts Capt. Wm. E. Dougherty, who has been in charge of the Hoopa Valley agency for the past three years, has been allowed to remain nominally in charge there until the present time. I believe that the best interests of the Government and of the Indians would be promoted by a separation of Hoopa Valley Agency from Mission Tule River (consolidated) Agency.

Abolishment of Mackinac Agency.—No provision for the salary of an agent for the Mackinac Agency, Mich., having been made in the act making appropriations for the current and contingent expenses of the Indian service for the fiscal year beginning July 1, 1889, the attention

of the Department was called to that fact by the office, under date of May 9, 1889, and instructions requested.

On May 14, 1889, the Department directed that the agent of the Mackinac Agency be notified that on and after June 30, 1889, the agency would be discontinued. The agent, M. W. Stevens, was so informed under date of May 17, 1889, and instructed to close up all the affairs of the agency on the evening of June 30, 1889, forwarding to this office all the books, papers, and records, and depositing to the credit of the United States any balance of public funds remaining in his hands on that evening.

To relieve the agent from responsibility under his official bond for certain office furniture, school buildings, school books, medical supplies, etc., it was found necessary to sell the furniture at public sale, and to have all school books which had not been distributed to the schools returned to this office, and all which were in use and partially worn given to the children.

A physician was appointed for the L'Anse and Vieux Desert bands of Chippewa Indians of Lake Superior, formerly under the care of the Mackinac Agency, who was to receive a salary of \$700 per annum, and have his headquarters near L'Anse, Mich. On recommendation of this office, he was designated as a special disbursing agent, and required to file an official bond in the penal sum of \$1,000. When this was effected, he was directed to receipt to Agent Stevens for the school buildings and medical property for which the latter was responsible, and in this way the affairs of the agency were finally closed.

The abolishing of this agency was not recommended by the Department, nor was this office consulted in the matter. The wisdom of such summary action may be questionable but it is not probable that any serious embarrassment to the service will result, or that the Indians now left to their own resources will suffer materially. They are fairly advanced in civilization, and should be allowed all the privileges of citizenship and the protection of State law; and the State should also make provision for the education of their children. At present they have no educational facilities, but they have been induced to send some of their children to Indian training schools, especially the school located at Carlisle, Pa.

INDIAN FINANCES.

Funds available during the fiscal years 1888-'89, and 1889-'90.—The following statement shows the amounts that were appropriated by Congress for the Indian service for the fiscal years 1888-'89 and 1889-'90:

TABLE 7.—*Showing appropriations for 1888-'89 and 1889-'90.*

Appropriations.	1888-'89.	1889-'90.	Increase.	Decrease.
Fulfilling treaties with Indian tribes, permanent.....	\$1,001,215.50	\$1,428,654.90	\$427,439.40	
Fulfilling treaties with Indian tribes, annual.....	1,656,240.00	1,585,796.84		\$70,443.16
Support of Indian tribes, gratuities.....	754,500.00	702,500.00		52,000.00
Support of Indian schools.....	1,352,765.00	1,379,568.13	26,803.13	
Incidental and contingent expenses.....	169,000.00	169,000.00		
Current expenses.....	877,420.00	818,331.50		59,088.50
	5,811,140.50	6,083,851.37	454,242.53	181,531.66
Net increase.....			272,710.87	

Under the head of "Fulfilling treaties with Indian tribes, permanent" are such specified sums as are required to be appropriated annually under existing treaties, either for a certain number of years or for an indefinite period.

A number of treaties contain provisions for clothing, subsistence, agency and school employés, etc., to be furnished by the United States for a certain number of years, but such provisions do not state specifically the amount of money that must be appropriated. These amounts are annually approximately estimated by this office, and the sums so appropriated can be used only for expenditures incurred during the fiscal year for which the appropriations were made. The total sums so appropriated by Congress for the fiscal years 1888-'89 and 1889-'90 are to be found in above table (No. 7), under the head of "Fulfilling treaties with Indian tribes, annual."

A number of tribes have no treaties; others have treaties, but the amounts due under these treaties are not sufficient for their support, and for such Congress annually appropriates certain sums as gratuities. The total sums appropriated for such purpose for the fiscal years 1888-'89 and 1889-'90 are to be found in above table, under the head of "Support of Indian tribes, gratuities."

For Indian education Congress annually appropriates certain sums in addition to those provided for under existing treaties. The total amounts of such appropriation for the fiscal years 1888-'89 and 1889-'90 are found in above table, under the head of "Support of Indian schools."

For contingent and incidental expenses of agents and their employés, for aid for certain tribes in Arizona, California, Nevada, Oregon, Utah, and Washington, etc., Congress annually appropriates certain sums, the totals of which for the fiscal years 1888-'89 and 1889-'90 are found in the above table, under the head of "Incidental and contingent expenses of Indian service."

For pay of agents, interpreters, Indian police, additional farmers, Indian inspectors, superintendent of schools, for the erection and repair of agency buildings, surveying and allotting land, advertising, telegraphing, transportation of Indian supplies, and for a number of other purposes, Congress annually appropriates certain sums. The total amounts appropriated for these purposes for the fiscal years 1888-'89 and 1889-'90 are found in the above table, under the head of "Current expenses."

The increase in appropriations for 1889-'90, as compared with 1888-'89, is explained as follows: The increase under the head of "Fulfilling treaties with Indian tribes, permanent" is caused by appropriations made in favor of the Pottawatomie and Chickasaw Nations, for payment of old claims found due them. The Pottawatomie Indians, under the second clause of article 10 of their treaty of August 7, 1868, have had a claim against the United States since January 5, 1869, and an appropriation was made during the last session to pay them the principal, with interest at 5 per cent. per annum from January 5, 1869, to June 30, 1889. The appropriation for the Chickasaw Nation was made to reimburse them for moneys improperly disbursed, as required by article 4, treaty of June 22, 1852.

In addition to the appropriations named in Table 7, there were available for expenditure, at the commencement of the fiscal years 1888-'89 and 1889-'90, the following unexpended balances of permanent Indian funds:

TABLE 8.—*Showing unexpended balances of permanent funds available for 1888-'89 and 1889-'90.*

Balances—	1888-'89.	1889-'90.	Increase.	Decrease.
Of funds appropriated, treaty stipulations of a permanent character	\$414, 675. 50	\$624, 658. 07	\$209, 982. 57	.....
Of funds appropriated for erection of school buildings at various points.	119, 620. 99	152, 209. 52	32, 588. 53	.....
Of appropriations for negotiating treaties with certain Indian tribes, surveying, and allotting Indian reservations, digging ditches, and proceeds of sales of Indian lands.	428, 156. 11	319, 731. 02	.....	\$108, 425. 08
Of Indian moneys, miscellaneous.	104, 903. 87	132, 105. 63	27, 201. 81	.....
Total	1, 067, 356. 47	1, 223, 704. 29	269, 772. 91	108, 425. 09
Net increase			161, 347. 82	

The total amount of trust funds, in bonds or otherwise, held at the beginning of the fiscal years 1888-'89 and 1889-'90 were as follows:

TABLE 9.—*Showing trust funds held at commencement of 1888-'89 and 1889-'90.*

Trust funds.	1888-'89,	1889-'90.	Increase.
Principal	\$17, 097, 463. 32	\$20, 909, 556. 93	\$3, 812, 093. 61
Accrued interest, annual	860, 355. 19	1, 041, 513. 80	181, 158. 61
Accrued interest, balances	656, 023. 44	803, 331. 81	147, 308. 37
Total	18, 613, 841. 95	22, 754, 402. 54	4, 140, 560. 59

The increase of over \$4,000,000 arises from the sale of land by the Creeks, Seminoles, and Osages.

The following table gives the several funds which were available for Indian expenditures at the commencement of the past fiscal year and the amount which was expended during that year from each of said funds.

TABLE 10.—*Showing money available and expenditures made during fiscal year ended June 30, 1889.*

Sources.	On hand July 1, 1888.	Expended during year.
Fulfilling treaties with Indian tribes, permanent.	\$1, 001, 215. 50	\$376, 557. 43
Fulfilling treaties with Indian tribes, annual.	1, 656, 240. 00	1, 506, 240. 00
Support of Indian tribes, gratuities.	754, 500. 00	733, 439. 90
Support of Indian schools.	1, 352, 765. 00	1, 131, 270. 02
Incidental and contingent expenses, Indian service	169, 000. 00	158, 347. 42
Current expenses.	877, 420. 00	772, 773. 79
Interest on trust funds	860, 355. 19	713, 046. 82
Total	6, 671, 495. 69	5, 991, 675. 38
Balances, permanent:		
Of funds appropriated under treaty stipulations of a permanent character.	414, 675. 50	414, 675. 50
Of funds appropriated for erection of school buildings at various points.	119, 620. 99	37, 814. 89
Of appropriations for negotiating treaties with certain Indian tribes, surveying and allotting Indian reservations, digging ditches, and proceeds of lands	428, 156. 11	224, 879. 98
Of Indian moneys, miscellaneous	104, 903. 87	39, 993. 11
Of interest on trust funds	656, 023. 44	.....
Total	1, 723, 379. 91	717, 363. 46
Aggregate	8, 394, 875. 60	6, 109, 038. 86

By summarizing the 1889-'90 columns of Tables 7 and 8, and the last two items of that column in Table 9, the total amount of funds available for expenditures for the Indian service during the fiscal year 1889-'90 is ascertained.

TABLE 11.—*Showing total money available for fiscal year ending June 30, 1890.*

Sources.	Amount.
Appropriations.....	\$6, 083, 851.37
Balances.....	1, 228, 704.29
Interest on trust funds.....	1, 041, 513.80
Interest, balances.....	803, 331.81
Total.....	9, 157, 401.27

TRUST FUNDS OF THE FIVE CIVILIZED TRIBES.

Of the \$20,909,556.93, principal, held in trust, as shown in the 1889-'90 column of Table 9, the sum of \$7,984,132.76 belongs to the five civilized tribes, in the following proportions:

TABLE 12.—*Showing trust funds of the five civilized tribes.*

Tribes.	Amount of principal.	Annual interest.
Cherokees.....	\$2, 625, 842.37	\$137, 469.33
Chickasaws.....	1, 308, 695.65	68, 404.95
Choctaws.....	549, 594.74	32, 344.73
Creeks.....	2, 000, 000.00	100, 000.00
Seminoles.....	1, 500, 000.00	75, 000.00
Total.....	7, 984, 132.76	413, 219.01

The interest on the principal of these funds is placed semi-annually, with the United States assistant treasurer at St. Louis, Mo., to the credit of the treasurer of each nation, and the expenditure of these funds is entirely under the control of the nation and its council. This office has no control whatever over these expenditures.

TRUST FUNDS OF OTHER TRIBES.

The balance of the before-named sum of \$20,909,556.93, amounting to \$12,925,424.17, belongs to a number of tribes, as stated below, and the interest thereon, at 4, 5, 6, and 7 per cent., as the case may be, is either paid to or expended for the benefit of the respective tribes.

TABLE 13.—*Showing trust funds of tribes other than the five civilized tribes.*

Tribes.	Principal.	Tribes.	Principal.
Chippewas and Christian Indians ..	\$42, 560.36	Pottawatomies	\$184, 094.37
Delawares.....	874, 178.54	Sac and Fox of Missouri.....	31, 654.12
Eastern Shawnees.....	9, 079.12	Sac and Fox of Mississippi.....	55, 058.21
Iowas.....	171, 543.37	Santee Sioux.....	20, 000.00
Kansas.....	27, 174.41	Senecas.....	40, 970.30
Kaskaskias, Peorias, Weas, and Piankeshaws.....	58, 362.53	Senecas, Tonawanda band.....	89, 950.60
Kickapoos.....	130, 736.79	Senecas and Shawnees.....	15, 140.42
L'Anse and Vieux de Sort bands ..	20, 000.00	Shawnees.....	1, 985.65
Menomonees.....	153, 039.33	Stockbridges.....	75, 988.30
Osages.....	8, 162, 826.76	Shoshones and Bannocks.....	3, 000.00
Omahas.....	191, 766.77	Unatillas.....	34, 361.64
Otoes and Missourians.....	412, 416.39	Utes.....	1, 750, 000.00
Pawnees.....	284, 721.80	Total.....	12, 925, 424.17
Poncas.....	70, 000.00		

The balances of accrued trust-fund interest, as shown in table 9, amounting to \$803,331.81, are applicable for such expenditures as from time to time may be found to be proper.

CASH PAYMENTS TO INDIANS.

Payments made to Indians per capita, of interest on funds held in trust by the Government for them, and of funds annually appropriated in fulfillment of treaty stipulations, have amounted to about \$645,000 during the year.

In view of the advanced condition of the Omaha Indians in Nebraska, and to enable them to further improve their homesteads and to purchase cattle, agricultural implements, and other necessary articles, the payment of annuities due them was anticipated, at their earnest request. By act approved May 15, 1888 (25 Stat., 150), the last seven annual installments of \$10,000 each, due them under fourth article of the treaty of March 16, 1854 (10 Stat., 1044), were appropriated and directed to be paid to them in two annual installments of \$35,000 each, with the provision that the payment of the second installment should be made only to those who made wise use of the money obtained from the first payment. The act also provided that a special agent should make the payments, advise and direct the expenditure of the money by the Indians in such manner as would be conducive to their welfare, and make report thereon to the Secretary.

The special agent completed the payment of the first installment during third quarter, 1889. In his report, which shows how each head of a family and each single person expended his or her share of the payment, he states:

* * * From the report you will see that, on the whole, the tribe made most excellent use of their money; in fact, I think, much better than that number of white men would have made.' * * * In traveling over the reservation I could see evidence of improvement on every hand; such as new houses, new agricultural implements, etc. From present indications a large portion of the Omahas will, in a few years, be, as some of them now are, prosperous farmers and stock raisers.

It is therefore probable that, as soon as the requirements of the act will permit, the second installment will be paid to the Omahas.

The annuity payments of \$400 to the Pottawatomie Indians of Huron, under second article of the treaty of November 17, 1807 (7 Stat., 106), and of \$1,100 to the Eel River Band of Miamis, under treaties with them of August 3, 1795, August 23, 1805, and September 30, 1809 (7 Stat., 51, 91, 114), have been made from year to year at an expense disproportionate to the sums disbursed, while the Indians could derive but slight benefit from the small amounts received per capita. Therefore, in the Indian appropriation act for the current fiscal year, Congress appropriated \$22,000 for the Miamis, and \$8,000 for the Pottawatomies, to pay in full all indebtedness of the Government to them under said treaties. The Department instructed this office that this money should be paid only to adults, and to guardians of minors and incompetents, appointed by a court having jurisdiction of their persons and property, and it directed that persons receiving and receipting for their own shares, and guardians acting for others, must be required to sign an agreement accepting said payments as a full discharge of all demands existing at that time, or that might hereafter exist, under and by virtue of any of the treaties above specified.

These instructions were strictly complied with and all the payments made, except the shares of three minor Miami children living in the

Indian Territory over whom no court had probate jurisdiction. Their shares were consequently returned to the United States Treasury, to remain there until the children shall attain their majority, or until some other legal means shall be found by which the Government may secure a release from liability to them.

During the summer of 1888 the Western Miami and the Kaskaskia, Peoria, and Piankeshaw Indians petitioned Congress to give them part of certain funds and stocks which the Government held in trust for them, this special payment being needed to avert suffering during the winter threatened by reason of the failure of crops. In compliance with their wishes, by act approved October 2, 1888 (25 Stat., 528), \$25,000 was provided for the Miamis and \$40,000 for the Kaskaskias, Peorias, and Piankeshaws, to be paid to them per capita "under such regulations for the protection of minors as may be prescribed by the Secretary Interior."

The only plan for securing to minors the benefits of this money was believed to be the appointment, by a competent court, of properly provided guardians; but as there was no court having probate jurisdiction over the persons and property of minors in the Indian Territory, where these people are located, payment was delayed until more specific legislation could be had. The attention of Congress having been called to the matter, an act was passed and approved March 2, 1889 (25 Stat., 993), which modified the act of October 2, 1888, by authorizing the shares of minor children to be paid to the parents, when said parents are competent (such competency to be determined by the chiefs of the respective tribes and the Indian agent), and the shares of minor orphans to be paid to guardians appointed by the probate court in and for Cherokee County, Kans. Under this provision payment was made as quickly as practicable, but the unavoidable delay was severely felt by the Indians.

The Sac and Fox Indians, in Iowa, still express dissatisfaction with the pro rata division of their tribal funds between themselves and that branch of the tribe located in the Indian Territory, and especially with the decision which deprives them of any part of the provision made for the support of the tribal government and for pay of the chiefs. They have refused to receive their last annuity. At an early day an effort will be made to ascertain the true cause of their grievances.

Until recently Big Hawk's band of Wisconsin Winnebagoes have persistently refused to receive their shares, nearly \$7,000, of the money provided by act of January 18, 1881 (21 Stat., 315), but they have notified the Office that they are now willing to accept it. A special agent, at present engaged in paying the whole tribe in Wisconsin their regular annuity for the last fiscal year, has been instructed to pay these back shares to Big Hawk's band, and money has been placed to his official credit for that purpose.

The largest regular annuity recently paid to any tribe is that paid to the Osages, which amounted to nearly \$250,000 last year, or about \$160 to each man, woman, and child. This, and their stock and farming interests, the latter in a great measure conducted by hired whites, make the Osages almost independent of labor, and as they are located where it is difficult to prevent them from procuring intoxicants or indulging their gambling propensities a very bad element is growing up amongst the younger members of the tribe, so that to many this money, with the idleness which it permits, is rather a harm than a benefit.

Indians as a class, however, are fast learning the proper use of money, and are generally as careful in its expenditure as are whites. The

Office is steadily endeavoring to encourage and reward the deserving by purchasing from them, whenever practicable, oats, hay, and other grain and supplies for agency and school use, giving Indians the preference when such purchases are to be made; also by employing them as freighters, agency and school employés, police, etc. By this means they received last year, in small cash payments, sums which will aggregate very nearly as follows:

Regular Indian employés at agencies	\$75,000
Irregular and miscellaneous employés.....	30,000
Interpreters	25,000
Policemen	75,000
Judges of "courts of Indian offenses"	5,000
Transportation of Indian supplies	85,000
Purchases of produce and for breaking land.....	65,000
Total.....	360,000

ISSUES OF SUBSISTENCE TO INDIANS.

In the issue of subsistence to Indians it is provided by section 4, of act of March 3, 1875 (18 Stats., 449):

That hereafter, for the purpose of properly distributing the supplies appropriated for the Indian service, it is hereby made the duty of each agent in charge of Indians and having supplies to distribute, to make out, at the commencement of each fiscal year, rolls of the Indians entitled to supplies at the agency, with the names of the Indians, and of the heads of families or lodges, with the number in each family or lodge, and to give out supplies to the heads of families and not to the heads of tribes or bands, and not to give out supplies for a greater length of time than one week in advance.

This provision was modified by section 2, act of March 3, 1877 [19 Stat., 293], as follows:

* * * *Provided, however,* That the Commissioner of Indian Affairs may in his discretion issue supplies for a greater period than one week to such Indians as are peaceably located upon their reservations and engaged in agriculture.

Upon the enactment of these provisions of law this office at once took such steps as were necessary to effect, if possible, a faithful application of the regulations thus prescribed at all ration agencies. It has, however, been found impracticable in several cases, and believed to be unwise in others, to endeavor to enforce a strict compliance with these legal requirements, nor is it believed, in view of the changed condition of many of the Indians since the passage of said laws, that the purpose Congress had in view requires the general enforcement of so much of the regulations as forbids the issue of subsistence in quantities to chiefs and headmen of tribes if such issues are made upon rolls prepared at the commencement of each fiscal year showing the names of the Indians and the heads of families or lodges, with the number in each family or lodge entitled to supplies.

The facts and circumstances are such that at six of the largest agencies issues are still made to the chiefs or heads of bands, who receipt for the supplies in bulk, and afterward divide them among the heads of families. The accounting officers of the Treasury in the settlement of the accounts of agents who issue subsistence in quantities hesitate to allow them credit therefor, on the ground that such issues are made contrary to the regulations of the laws cited above.

This office, on May 23 last, submitted the matter to the Treasury Department, with the reasons and explanations showing why it is impracticable and also undesirable to strictly comply with the laws on the subject, with the hope that a liberal construction of the spirit of the law would

permit such issues to be continued. Not that there was any desire on the part of this office to evade a strict compliance with law, but for the reason that the best interests of the service and the prosperity and advancement of the Indians seemed to demand that exception be made in some cases. That Department, however, after fully reviewing the correspondence and defining its duty in the premises, replied to the effect that it must be governed by the literal requirements of the act, and although admitting the wisdom of the position taken by this office, added that—

* * * It now clearly appears to be the duty of this (the honorable Second Auditor's) office to insist either that the terms of the act be complied with or that the law be modified to suit the practical difficulties of the case. Doubtless on proper representation of the facts, Congress would invest the administrative department with authority to make necessary exceptions to the literal operation of the statute. * * *

With the views entertained therefore by this office in regard to this subject, there seems to be no recourse open but to require Indian agents to act in strict conformity with the requirements of the section in question, or have the law itself so amended as to relieve them from an embarrassing position.

In view of this decision and to enable the Department to lay the whole matter intelligently before Congress, if such action should be decided upon, the agents whose Indians are most affected by this ruling were called upon to report to this office whether it was practicable to apply the rule at their agencies, and the advantages or disadvantages that would most likely result from a persistent effort to enforce it. I give below the substance of three replies.

The agent of the Cheyenne and Arapaho Agency, in the Indian Territory, says that his Indians are now located in colonies at different points on the reservation, from 12 to 75 miles from the agency headquarters where the commissary is, on small farms under instruction of practiced white farmers who reside with them, and that to compel these Indian farmers to come to the agency for rations would result in the abandonment of three-fourths of their farms and the camping of the Indians round the commissary as of old. To issue beef from the block to heads of families each week would require the services of at least twenty trained butchers and much more clerical help than is now needed. The Indians take good care of what is given to them, and all are well satisfied with the issue of their subsistence to the headmen of the tribe.

The agent of Uintah and Ouray Agency, Utah, says that to enforce the law at his agency would totally destroy the farming and industrial interests of his Indians, who are scattered on little farms all over the reservation, which contains over 4,000,000 acres. Some are 60 and some 70 miles from the agency headquarters. When coming to the agency their custom is to bring the whole family and to leave the farm deserted, so that whatever tends to keep them at home and at work is most beneficial and should be one of the main objects kept in view by the agent and the Department. The agent says that the enforcement of this section would be ruinous to the working Indians, and that this matter of issues of subsistence should, in justice to the Indians, be left to the discretion of the Department.

An Indian inspector in speaking of one colony of Indians at the Rosebud Agency, Dakota, says (and his remarks apply to all other colonies or separates settlements of Indians in farming communities):

These people are industrious and are trying to do something for themselves. They are perfectly competent to take care of their rations, and should be allowed to draw for a long time in advance. It is impossible for them to work their crops in the summer or to take proper care of their stock in winter, if each family is required to go to the agency for its supplies.

The foregoing remarks apply with equal force to the Kiowa Agency, in the Indian Territory, and to the San Carlos Agency, in Arizona, so that I need not repeat, but will conclude with asking particular attention to what the agent of Pine Ridge Agency, Dakota (also a large agency), has to say :

In the matter of issuing rations to the Indians of this agency, it is impracticable to comply with the law as it now stands. Entire satisfaction is given by our present mode of issue, which distributes the rations as fair as could be done by any other plan.

Weekly issues to heads of families could be made practicable only by locating the Indians within a few miles of the commissary. The advantage of issuing to heads of bands is that one person can draw rations for the entire band just as well as if each head of family was present. For each head of family to visit the agency every week to procure his rations would in a majority of cases occupy two-thirds of his time traveling back and forth. * * *

At a time when the sole occupation of the Indian was to draw his rations and smoke his pipe, living as he did under the very shadow of the commissary, it made little difference. * * * Now, whatever may be the result, we are earnestly working for the Indians' advancement, and the first step is to get them scattered out on farms suitable for tilling. This has been successfully accomplished along the several creeks running through the reservation, but it was necessary to locate many of the better farmers as much as sixty miles from the agency. * * *

I trust we will be permitted to continue our present mode of issuing subsistence; without this nothing can be done. Should we now be compelled to issue in accordance with this act we will be forced back to the place of beginning.

I think it will be plain to those who read the foregoing that it is neither practicable nor desirable to apply the provisions of the act to any of the agencies referred to above; and further, that as Indians at other ration agencies become advanced, and more generally interested in farming, it will be good policy to gradually extend exemption from its requirements, until every ration agency is relieved.

Therefore, in order that agents who in good faith and by permission of this department have made issues of subsistence to chiefs and head men for their tribes or bands, instead of to heads of families, may be relieved from suspensions made to their accounts by the Treasury Department, and in order that the manner of making such issues may be adapted to the changing condition of the Indians, I respectfully repeat office suggestion of May 23, 1889, that Congress be requested to insert in the act making appropriations for the expenses of the Indian department for the next fiscal year, some such item as the following :

That section 4, act of March third, eighteen hundred and seventy-five, as amended by section two, act of March third, eighteen hundred and seventy-seven, is hereby further amended by adding the following :

Provided further, That the Secretary of the Interior may at his discretion, by written order, approve issues of subsistence which have been made to heads of tribes or bands of Indians, instead of to heads of families, and that he may in future in like manner except any tribe or portion of a tribe from the operation of section four, act of March third, eighteen hundred and seventy-five, as amended by section two, of the act of March third, eighteen hundred and seventy-seven, when in his judgment the farming and other interests of the Indians and of the service demand it.

A CENSUS OF INDIANS.

In previous reports of this Bureau attention has been called to the difficulty which the office has experienced in obtaining a reliable enumeration of Indians, except at agencies where the Indians receive regular issues of rations. With no provision for defraying the expense of taking a census, the returns can not be accurate as to a large number of the Indians upon reservations, and as to the number of Indians off reservations and not under the jurisdiction of agents, the office has no reliable data and can furnish only estimates made up from chance information.

It is extremely desirable that the census of 1890 should make a special enumeration of the Indians in the United States, both on and off reservations, and the officers and employés of the Indian Bureau will be ready to co-operate in this work so far as possible.

MISCELLANEOUS MATTERS RELATING TO SPECIAL RESERVATIONS AND TRIBES.

THE MISSION INDIANS IN CALIFORNIA.

For the last sixteen years the difficulties which surround these Indians, the uncertain tenure by which they hold their lands, and the unjust treatment to which they have been subjected, have received the careful consideration of this Office, and have been frequently alluded to in its annual reports. Various measures of relief have been devised and submitted to Congress without avail.

As far as practicable, under existing laws, intruders have been removed from their reservations, and their right to occupy lands in private grants has been maintained through the courts.

January 10, 1884, a draft of a bill for their relief was transmitted to the Department for submission to Congress; which bill (in its main features) was continuously before that body up to the close of the last Congress. It has been passed by the Senate three times, and as many times has failed to become a law by the non-action of the House of Representatives.

The principal feature of this bill was the authorization of the appointment of a commission of three disinterested persons, to arrange a just and satisfactory settlement of these Indians on reservations to be secured to them by patent. Without such a commission it is impossible to make any satisfactory adjustment of their difficulties, or to determine the just rights of white settlers.

This bill, with such amendments as may be considered necessary in the light of later information, will be prepared for submission to Congress at the beginning of its next session.

ROUND VALLEY RESERVATION IN CALIFORNIA.

The state of affairs existing upon this reservation has been the subject of repeated comment in the annual reports of this Office for many years. The matter is of such grave importance, and the necessity for legislation is so great, that a complete history of the reservation and the efforts made to maintain the rights of the Government and the Indians is deemed essential.

Round Valley was first selected for Indian purposes by Superintendent Henley in 1856. In a letter addressed to him from this office, dated November 18, 1858, he was, by order of the Secretary of the Interior, directed to give public notice that the entire valley was set apart and reserved for Indian purposes. It has been claimed that Superintendent Henley did not make this order public, and that it was not proclaimed until 1860. On the 28th of January, 1859, however, Superintendent Henley transmitted to this office a remonstrance against the occupation of Round Valley for Indian purposes, signed by a number of settlers, dated January 18, 1859, in which they said:

Now we learn that a proclamation has been made by the Superintendent of Indian Affairs, by order of the Department, claiming the entire valley as an Indian reservation.

In a letter dated January 6, 1860, from this office to the General Land Office, reciting the facts in regard to the establishment of this reservation, it was stated that they were deemed sufficient to show that Round Valley had been duly set apart and recognized by the Department as an Indian reservation, and the Commissioner of the General Land Office was therefore requested to respect the same upon the books of that office, and to notify the local officers accordingly.

May 3, 1860, the surveyor-general of California, acting under instructions from the General Land Office, reported a survey of the boundaries of said reservation. In a communication dated June 21, 1860, the General Land Office inclosed to this office a plat of said survey, certified by the surveyor-general of California, May 4, 1860, showing the reservation to be situated partly in townships 22 and 23 north of ranges 12 and 13 west of the Mount Diablo meridian, and to comprise 25,030.8 acres.

On the 27th of October, 1863, an appraisement of the claims and improvements of settlers in the valley was reported by Superintendent Steele, the value of the same, including growing crops, being placed at \$50,000, and of their stock at \$25,000 additional.

By the act of Congress approved April 8, 1864 (13 Stat. L., 39), it was provided:

That there shall be set apart by the President, and at his discretion, not exceeding four tracts of land within the limits of said State (California), to be retained by the United States for the purpose of Indian reservations.

It was also provided that if it was found impracticable to establish the reservations contemplated without embracing improvements made within their limits by white persons lawfully there, the Secretary of the Interior might contract for the purchase of such improvements, but that no money should be paid until the valuation had been approved by Congress and an appropriation made therefor. It was further provided that such reservations might include any reservations theretofore established, in which case the same might be enlarged by the President.

In a report dated January 1, 1867, Special Commissioner Stevens gave the names of twenty-six settlers in the valley who had 9,990 acres of land (an average of 384 acres each), and stated that there were also fifteen or twenty persons with a small cabin and inclosures, each claiming a quarter section.

October 7, 1869, report was made to the Department recommending that Superintendent McIntosh be instructed to report the reserve extended to the summits of the mountains surrounding the valley, an appraisement of the improvements of settlers within said valley, and also a contract with the settlers for purchase of their improvements, in order that the same might be submitted for the action of Congress as provided in the act of April 8, 1864. These recommendations were approved by the Department October 12, 1869, and Superintendent McIntosh was instructed accordingly on the 18th of the same month.

December 27, 1869, Superintendent McIntosh submitted his report, including an appraisement of the improvements of settlers in the valley, amounting in the aggregate to \$109,555. In many cases settlement and improvements had been made long after the survey of the reservation in 1860, and in others settlers had purchased, after that time, improvements which had been made before. Some of the persons whose improvements were appraised had been officers and employes of the Indian Department at the time settlement was made or the improvements purchased. The contracts for the purchase of improvements were not made,

among other reasons because Superintendent McIntosh was in doubt as to the rights of these parties.

March 4, 1870, this report was submitted to the Department with request for the direction of the Secretary in the premises, in order that the Superintendent might be properly instructed in the course he should pursue in making contracts for the improvements of settlers upon the reservation, and with recommendation that the President be requested to issue an executive order for the enlargement of the Round Valley Reservation. On the 30th of March the President issued the executive order requested, and on April 1, 1870, the papers were returned without remark upon the request for instruction as to the settlers. There is no record to show that this appraisement was ever presented to Congress, or that any further action was taken thereon by the Department.

From the first establishment of this reservation, in 1856, the settlers then there, re-enforced by those who came in afterward—some of them Government employes and others allowed to settle by the agents in charge—protested against the occupation of the valley for Indian purposes, and used every effort to defeat the intentions of the Department in the premises.

In August, 1862, a party of twenty settlers surprised a band of Indians and murdered twenty-two of their number, of all ages and both sexes. The intended attack was known to the employes (Short & Sons, who afterwards became "settlers" on the reservation), who not only took no steps to prevent the massacre, but loaned their revolvers to the intending murderers. The excuse for this act of barbarity was that the Indians had killed some of the stock belonging to the settlers.

In November, 1862, a company of troops was posted on the reservation and the officer in command was instructed by General Wright to remove all persons then residing within its limits on the requisition of the supervisor in charge. November 14, 1862, Superintendent Hanson reported to this office that, as the season was advancing and he was not disposed to distress the settlers, he had given the supervisor instructions to permit them to remain in the valley until the weather was auspicious and they could have time to dispose of their produce and look for other homes, provided they would give assurances not to molest the Indians or Government property. Nothing further is known of this attempt to dispossess the settlers by force.

In his annual report for 1869, Superintendent Whiting referred to Round Valley as the most desirable location for an Indian reservation in the State, and said:

The Government has about 5,000 acres only inclosed out of 25,000 reserved. The settlers have appropriated the other 20,000, besides much more in the foot-hills. Possessory claims on reservation lands are selling for nearly as much as if the settlers had the fee simple. Large herds of cattle and sheep are also driven into the valley and in the foot-hills by persons having no pretense of claim to the land. This stock, belonging to strangers, is consuming much of the pasturage needed for reservation animals.

The Indian agent and Government employes are wholly unable to prevent these encroachments. (Annual Report Commissioner of Indian Affairs, 1869, p. 180.)

In his annual report for 1870 Superintendent McIntosh said:

In my supplementary report made last year I expressed the opinion that all persons who moved within the area of Round Valley after public notice was given by the Government, through its proper agent, that it intended to hold the whole of Round Valley for Indian purposes, and forbidding any other persons from locating therein, were interlopers, and could make no just claim upon the Government for their improvements. I have not changed that opinion. It is for the Government to decide whether it will pay a premium to persons who deliberately violate its express orders. The

importance of having the whole of Round Valley for an Indian reservation, free from all outside influences, has been so many times represented to you by me during the past year that I forbear pressing the subject any further. (Annual Report Commissioner of Indian Affairs for 1870, p. 76.)

In a report made in 1871, Hon. John V. Farwell said:

There are at present about one hundred settlers in the valley, all of them squatters, knowing when they came that it was set aside for Indian occupancy, but the fact that no survey has been made has emboldened some of them to take up claims inside the reservation fences, under the swamp-land act. I rode over these swamp-lands, and should consider them as valuable for cultivation as any in the valley. One large farm of 2,500 acres is claimed by a former superintendent, and I was informed that the work of fencing, etc., was all done by Indians. Timber claims and cattle ranges have been taken by these settlers upon the mountains until the reservation cattle have been driven from their accustomed places for feeding, and are shot at sight when found upon a range taken up by a white settler. On some of the timber claims thus made the claimants threaten to shoot any Indians sent there by the agent to get timber for fences or houses. (Annual Report of Commissioner of Indian Affairs for 1871, p. 155.)

In a report dated January 31, 1871, upon a bill for the restoration of a portion of the Round Valley Reservation, Commissioner Parker, after reciting the history of the reservation, said:

The effect of the bill, if it becomes a law, will be direct conflict with the policy of the Department, and if its provisions should be executed and the majority of this valley pass into the ownership and occupancy of whites, the usefulness of the remainder for Indian purposes would be virtually destroyed.

In office report dated October 17, 1871, it was recommended that the Attorney-General be requested to institute proceedings against all persons within Round Valley in all cases where he should be of the opinion that action for trespass could be maintained. November 6, 1871, certified copies of the papers relating to the case were transmitted to Superintendent Whiting for use of the district attorney, with a full statement of facts, with directions to render the district attorney all facilities in the prosecution of cases arising under instructions given him by the Attorney-General in pursuance of the foregoing recommendation.

In a report dated June 3, 1872, Superintendent Whiting reported that suit had been commenced against two of the trespassers, as test cases, but that on the 3d of April preceding, the district attorney had received a telegraphic dispatch and order from the Attorney-General to suspend proceedings against the settlers until further instructions. Superintendent Whiting remarked that he was not surprised at this action, as he knew that an assessment had been levied upon the settlers to raise funds with which to send an attorney to Washington, and said:

So long as the settlers maintain a paid lobby in Washington it will require vigilance on behalf of the Indian Department to prevent further mischief and to keep what little possession we have left in Round Valley.

He also suggested an enlargement of the reservation.

January 27, 1873, this office, in reporting upon "a bill to provide for the sale to actual settlers of the surplus lands of the Round Valley Indian Reservation," stated that it was not in possession of any important facts in addition to those set forth in office report of January 29, 1872. In that report Commissioner Walker had opposed any reduction of the reservation, deeming it essential for the best interests of the Indian service and for the maintenance of the integrity of the reservation that the boundaries as extended by the executive order of March 30, 1870, should be preserved. (See also another report of same date, House Ex. Doc. No. 224, Forty-second Congress, second session.)

On the 3d of March, 1873, Congress passed "An act to restore a part of the Round Valley Indian Reservation in California to the public lands, and for other purposes." (17 Stat., 633.) It does not appear that any report was ever made by this office in relation to this act. Certainly no favorable recommendation was made. The first section of the act provided:

That all that portion of the Indian reservation in Round Valley, California, which lies south of the township line running east and west between townships twenty-two and twenty-three north, of ranges twelve and thirteen west of the Mount Diablo meridian, be, and the same is hereby, restored to the public lands of the United States, and the Secretary of the Interior shall cause the same to be surveyed and offered for sale in legal subdivisions, at not less than one dollar and twenty-five cents per acre: *Provided*, That the improvements owned by persons on the lands hereby restored before the passage of this act shall be the sole property of such persons. * * * *And provided further*, That the proceeds of the sale of the lands hereby restored, or so much thereof as may be necessary, shall be used to pay the improvements and claims of settlers now residing within the limits of the new reservation created under this act, and for improvements of Indians on lands hereby restored to the public lands, after such improvements shall have been appraised and the appraisement approved as hereinafter provided.

The second section defined the southern, eastern, and western boundaries of the reservation, and provided for the appointment of three commissioners to establish the northern boundary. It also directed that these commissioners should make an appraisement of all improvements of white persons situated north of the southern boundary of the reservation as established under the act, and authorized the Secretary of the Interior to pay for these improvements out of the money reserved for the purpose by the first section of the act.

The third section directed the President to cause to be withdrawn from sale or entry all the land lying within the boundaries described by the second section and the northern boundary as fixed by the commission, when approved, and required all settlers within the limits of the reservation to remove therefrom as soon as they should be paid for, or tendered the amount of, the appraised value of their improvements.

Under this act Hons. J. P. C. Shanks, Charles Marsh, and B. R. Cowen were designated a commission to make the appraisements and to fix the northern boundary. On the 18th of November, 1873, the commission submitted a report of their appraisements of the improvements, with their recommendation as to the establishment of the northern boundary of the reservation (see H. R. Ex. Doc. No. 118, Forty-third Congress, first session), which was approved by the Department August 4, 1874. The total value of the improvements as appraised was \$32,669.78. On the 18th of May, 1875, an executive order was issued defining the reservation in accordance with the act of March 3, 1873,* and the report of the commission.

The effect of the action taken under the act of March 3, 1873, was to restore some 12,000 acres of valley land to the public domain and to add some 89,000 acres of mountain land to the reservation. The commissioners, in their report, estimated the lands restored to be worth some \$54,400, and suggested an amendment to the act so as to authorize said lands to be appraised and offered for sale. A draft of a bill for this purpose was submitted to the Department January 27, 1874, but it did not become a law. The sum of \$17,934.37 was realized from the

* By executive order of July 26, 1876, the 640 acres embraced in the military reservation known as Camp Wright was reserved for the use and occupation of the Round Valley Indians, making the area of the reservation 102,118 acres. (The outboundaries were surveyed in December, 1876, and January, 1877, and the survey approved January 17, 1877.) •

sale of the restored lands, and the sum of \$21,640 was paid in settlement of a portion of the claims of settlers within the new reservation.

In a letter dated February 27, 1875, Agent Burchard reported that news had just reached the valley that the Senate had defeated the proposed amendment to the act of 1873, whereupon the work of "land-jumping," previously commenced, was intensified, it being done within the lines of the new reservation as well as within the lines established by the McIntosh survey and order of 1870.

On the 17th of March, 1875, Agent Burchard was instructed to notify all white persons who had established themselves within the boundaries of the Round Valley Reserve as created by the act of 1873, since the date of that act, that they must leave the reservation within thirty days or measures would be taken by the Government for their ejection. As a result of this action, Agent Burchard took the bond of one party to remove his stock within twenty-four hours, and to comply with the rules and regulations of the reservation. He also notified several other persons that they must leave the reservation.

In a report dated April 30, 1875, Inspector Vandever referred to the reservation as follows:

These claimants occupy and claim nearly all the land and pasture outside of the reservation fences to the exclusion of the Indians, and reservation cattle are allowed little or no participation in the range. Not one of these claimants but who located on the land he occupies with the full knowledge that he was within the reservation boundaries. * * *

This act (1873) was passed at the solicitation of and in the interest of the settlers, as a final compromise and settlement of their supposed rights and claims. * * * The amount realized from the sale of lands south of the designated line is not sufficient to pay the whole appraisement of claims and improvements situated north of the line, and Congress at its last session failed to provide for the deficiency. In consequence of this failure many of the settlers seem to infer that Congress never will appropriate money to extinguish their claims, and they freely express the hope that the reservation may be ultimately abandoned and the land surveyed and opened to entry. * * * It is very important that this question should be settled with the least possible delay, as efforts will be made to defer or finally defeat the payment altogether, and thus retain possession of the land.

June 21, 1875, Agent Burchard was directed to make payment to the settlers in accordance with previous instructions without further delay, at the same time giving them notice that they must leave the reserve on or before the 31st day of October next, "and in case of their refusal to do so at that time you will call upon the military authority to assist you in removing them." July 2, 1875, Agent Burchard asked for authority to notify such parties as had been tendered the appraised value of their improvements to vacate or leave the reservation on or before the 30th day of September, 1875, and on July 17, 1875, he was authorized to issue such notices. On the 11th of September, 1875, he was again directed to carry out the instructions theretofore given.

September 25, 1875, Hon. A. C. Barstow, a member of the Board of Indian Commissioners, was requested to visit the Round Valley Reservation to make a thorough investigation of the grounds upon which the settlers refused to accept compensation for their improvements, and to advise with Agent Burchard as to the best course to be pursued in securing their removal from the reservation, and to submit a full and complete statement in regard to the reserve, the claimants remaining upon it, and the character of their claims. He was also requested to have his report embrace such information as would enable the office to fully understand the state of affairs on the reserve and take intelligent action relative thereto, and, if he found that military force would be required, to confer with General Schofield upon the subject, in order that when

the force should be requested by this Department the commander of the military division might have a full understanding of the subject.

October 27, 1875, he submitted his report, in which, after referring to the manner in which Commissioners Shanks, Owen, and Marsh had discharged their duties, he stated:

The case is so clear, the needs of the reservation so great, and delay from one cause and another so full of danger, that I recommend the ejection by military force under the command of a wise and prudent officer.

On the same day the Commissioner of Indian Affairs requested that he be authorized to cause the removal from the reservation of all settlers who had received or been tendered the amount of the appraised value of their improvements, and that the Secretary of War be requested to give directions to the proper military officer to furnish such force as might be necessary to enable the agent to effect such removal. On the next day, October 28, 1875, the Secretary granted authority, and made request of the War Department as recommended. On the same day Agent Burchard was informed of the action taken and instructed to carry the purpose of the Office into effect, and Inspector Vandever was also instructed to proceed to the Round Valley Reservation and render Agent Burchard all the co-operation in his power in accomplishing the object of his instructions.

Under date of November 20, 1875, Inspector Vandever forwarded to this Office an opinion of the United States district attorney for California to the effect that, in view of the act of March 3, 1873, the facts to justify a forcible removal must first be judicially ascertained, and that the inspector would not be justified in invoking the aid of the military in the first instance. November 22, 1875, Inspector Vandever, referring to the opinion of the district attorney, said:

Three of the settlers—Thompson, Eberle, and Bowen—have accepted the tender, put the money in their pockets, and refuse to remove. Frank Asbel, Pierce Asbel, and Gibson refuse the tender and remain. The three last named, whose improvements are of little value, hold a range of many thousand acres, comprising the best pasture lands on the reservation. In utter disregard of law and equity, the six men above named defy the Government and retain possession. Their presence is undeniably detrimental to the peace and welfare of the Indians, and I recommend that specific orders be made, under section 2149 of the Revised Statutes of the United States, directing their removal. * * * A combination has been formed by a few unscrupulous men to dispossess the Indians of the Round Valley Reservation.

The act of March 3, 1873, was intended as a division of the old reservation between the settlers and the Indians. The combination took its part under that act, and now the men comprising it are endeavoring to filch the balance.

November 30, 1875, the matter was again presented to the Department as follows:

The Department and the Government is suffering great discredit at the present time for failure to insist upon keeping lands for the use of the Mission Indians in 1871. The sorrows of those Indians and the public disgrace attaching to their ill-treatment have arisen from the yielding to the demands of the white men who were determined to prevent them from securing permanent homes on the reservation set apart for them.

I trust no such record will be found hereafter relating to the Round Valley Reserve. The agent has been instructed, under date of October 28, to eject these settlers, but he is unable to do so without the aid of the military.

I respectfully request that steps be taken to secure positive directions through the War Department to act immediately on the request of Inspector Vandever or of Agent Burchard.

Under date of December 2, 1875, the Secretary replied that as the power to employ the military forces to remove the settlers from Round Valley appeared to be doubtful, legal proceedings should be taken for their removal by the civil authorities.

Thus ended the first attempt after the passage of the act of 1873 to remove the settlers by force.

December 7, 1875, Agent Burchard was instructed to confer with the district attorney with a view to instituting legal proceedings for ejectment of settlers. During the years 1876, 1877, and 1878 frequent reports were made by this office urging speedy action of the district attorney, and giving its views at length on the legal aspect of the cases against the settlers.

As far back as March, 1873, the United States had brought suit in the circuit court for the district of California against Fred. Bourne, administrator of C. H. Bourne and others, to recover possession of certain lands in the reservation claimed by these parties in part by purchase from the State of California, by which they were claimed as "swamp and overflowed lands."

On the 31st of May, 1880, the circuit court rendered judgment confirming Eberle, Thompson, and Bowen in the occupation and ownership of the "swamp lands" purchased of the State, and also confirming the right of Frank Asbill, Pierce Asbill, and E. S. Gibson to occupy large tracts of lands described by metes and bounds in the judgment of the court.

As to the last three persons, the court found as follows :

That as to defendants Gibson, Frank M. Asbill, and Pierce Asbill, who entered upon the lands possessed by them before said lands were included in said reservation, the act of Congress, entitled "An act to restore a part of the Round Valley Indian Reservation in California to the public lands, and for other purposes," approved March 3, 1873, under which this proceeding is had, recognizes their rights, respectively, to retain possession of the lands in their several possessions, being the lands specifically described in their several answers, until an appraisement and payment, or tender to them, by the plaintiff, of appraised value of all their improvements, and as the commissioners refused to examine or to appraise the larger part of their several improvements, and no payment or tender of the appraised value was made therefor, the conditions prescribed by said act, precedent to the right of said plaintiff to take or recover possession of said lands for the purposes of said act, have not been performed by plaintiff, and the plaintiff is not yet entitled, under said act, to recover of said defendants the possession of said lands so described in the respective answers of said last-named defendants.

Gibson's improvements had been appraised at \$1,000. The court found that he had other improvements to the value of \$1,100. Gibson occupied from 10,000 to 12,000 acres of land, the possession of which was awarded him by the court, and, with his partners, he now occupies some 28,000 acres. As to the failure of the commission to appraise all his improvements, Commissioner Barstow, in his report of October 27, 1875, says:

E. S. Gibson, who is occupying 10,000 to 12,000 acres of mountain land for a sheep ranch, complains that the commissioners did not allow him for eight cabins used by his herders, which are scattered over this large tract.

The commissioners wisely refused to allow for improvements made upon more land than a settler would have a right to pre-empt when opened by survey.

Gibson was formerly an employé of the Indian Department. His name does not appear in the appraisement made by General McIntosh, but the improvements of Henley Brothers, his present partners, sons of Superintendent Henley, who settled in 1857, were appraised at \$11,000.

Pierce Asbill's improvements were appraised at \$580. The court found that he had other improvements valued at \$725. The note-book of the commissioners contains the following entry relative to the case:

His house, barn, etc., are south of the township line, and therefore not appraised.

Inspector Vandever says:

Pierce Asbill lives south of the line, and the law provides that only those *residing* north of the line shall be allowed for improvements.

Frank Asbill's improvements were appraised at \$304.78. The court found that he had other improvements valued at \$1,000. The Asbills now occupy 8,500 acres. They settled in the reservation some years after it was set aside.

As to the "swamp lands," it may be remarked that by the act of May 14, 1862, the legislature of the State of California granted all lands belonging to the State and within any reservation to the United States. (State Statutes, 1850 to 1864, page 617.) Certificates of purchase were not issued to the defendants until after the passage of said act, and the State, by the subsequent act of April 27, 1863, section 19 (*ibid.*, 613), provided that in case any of the lands sold by the State proved to be within the boundaries of a grant or otherwise not the property of the State, the holder or assignee of the certificate of purchase or patent should be entitled to receive in exchange therefor a certificate from the register of the State land office that such amount had been paid, which certificate should be received in payment for any other lands of the same class.

June 24, 1880, report was made recommending that the Attorney-General be requested to instruct the proper district attorney to move for a new trial in these cases, and, if necessary, to appeal to the Supreme Court of the United States. Appeal was subsequently taken to the Supreme Court, which appeal was dismissed, on the authority of the Attorney-General, on the 8th of January, 1884. This Office was wholly ignorant of this contemplated action.

Subsequently the State applied to have the lands certified to her, and this office, in report dated February 26, 1884, suggested whether the Department would not be justified in instructing the General Land Office not to certify these lands to the State, leaving the question to be further tested by mandamus, should the State desire to avail herself of that remedy. The list was, however, shortly afterwards certified as requested.

Thus ended the first attempt to dispossess the settlers in Round Valley by proceedings in the courts.

Subsequently this office repeatedly asked for an appropriation to pay the balance of the claims of settlers for improvements, but without favorable result.

In the summer of 1884 a subcommittee of the Senate Committee on Indian Affairs visited the reservation to investigate the "present and past management of said reservation, and of all abuses of the rights and interests of the Indians thereon." During the last week of the session, February 27, 1885, the committee submitted its report (Senate Report No. 1522, Forty-eighth Congress, second session).

The committee found, what had been well known to and repeatedly reported by this Office for ten years, that some 97,000 acres of the 102,000 in the reservation were occupied by trespassers, and that 44,000 sheep and 1,600 head of horses, cattle, and hogs were grazed upon the reservation by these men. They also stated that the Government for the last twelve or thirteen years had been obliged to pay during that time for the support of the few Indians upon the reservation the sum of \$241,975.93, an average of \$20,165 per year, while the reservation contained land well calculated for the support of many more Indians than

were to be found in the State of California. Their report also said that the act of 1873—

Provided for all such improvements as then existed upon the land put there by men who went there as settlers, and these should be paid for; but it furnishes no ground for the claim of other persons but those who were then the owners of improvements upon the land and their erecting new improvements or maintaining any possession of the land whatever while waiting for the United States to pay the original settlers for the improvements they then had. In the opinion of the committee, all persons except those who had actually erected improvements upon this land prior to that act are trespassers, and that those persons who were then occupants and have never been tendered the appraised value of their improvements can at most claim the occupancy of but 160 acres while waiting for the payment provided for in the act.

This has been the opinion of this Office since 1873, but unfortunately the courts of the United States have held a different opinion and decided that one person might occupy 10,000 acres of land until a few corrals, shocks, and cabins had been appraised and paid for. In conclusion, the committee said:

The present condition of things ought not longer to continue. If these occupants have any claim upon the Government growing out of the failure on its part to comply with the statute of 1873 it is quite time the matter was considered and every claim of that kind satisfied.

[This Office had been trying to have this done for ten years, but Congress had turned a deaf ear to its appeals.]

The committee are of the opinion that the earliest measures should be taken to reduce the boundaries of this reservation to the present want of the Indians. * * * A few thousand acres of valley land, with perhaps a small portion of upland for grazing purposes, is all that can be utilized for their benefit. To these needs the limits of the reservation should be reduced, and all Indians capable of taking care of themselves should be put upon a sufficient amount of this valley land, each in severalty, and in quantity sufficient for his support. * * *

The committee think that a commission should be appointed to appraise this land, in quantities of not more than 640 acres, and that it should thereafter be sold at auction to the highest bidder above said appraisal, and the proceeds, after defraying the expenses of the sale and reduction, should be held by the United States in trust for these Indians, or such other Indians as justice and equity may require. The necessity of making some such disposition as this of the reservation is very pressing, and a longer continuance of the present state of things is a waste of large resources, and is suffering the Indians to drift away into useless as well as spasmodic efforts to sustain themselves, while the Government property is going to decay.

The committee submitted no measure to enable the Department to carry out its suggestions.

Under date of December 16, 1885, Commissioner Atkins submitted for presentation to Congress the draught of a bill, embodying in the main the suggestions contained in the committee's report, accompanied by a full statement of the facts and the necessity for legislation upon the subject. (See House Ex. Doc. No. 21, Forty-ninth Congress, first session.) The bill passed the Senate, but failed in the House of Representatives.

After the final adjournment of the Forty-ninth Congress it was determined to make one more effort to secure to the Round Valley Indians some portion at least of the 96,000 acres in the possession of white men, although but little hope appears to have been entertained that anything would be accomplished. Accordingly, on the 2d of April, 1887, recommendation was made that authority be granted for the removal from the reservation of all parties found to be unlawfully thereon, and for the employment of the necessary military force. Authority was granted, and on the 25th of May, 1887, the agent was instructed to notify all parties unlawfully upon the reservation to remove therefrom, with all of their stock and personal effects, on or before the 1st day of August,

1887, and that in the event of their failure to remove their ejectionment would be effected by a sufficient military force. From this order there were excepted the persons and lands covered by the judgment of the United States circuit court rendered May 31, 1880; all persons occupying land the title to which had passed out of the United States, as shown by an abstract furnished by the General Land Office; and parties who had improvements within the reservation on the 3d of March, 1873, to whom payment or tender of payment had not been made. All of these parties were to be confined to the lands actually covered by the exception, and the latter class were to be confined to 160 acres each.

September 30, 1887, Agent Yates telegraphed that he was proceeding to eject settlers by military force as directed, when he was served with an order to show cause before the superior court of Sonoma County why he should not be restrained. October 1, 1887, report was made recommending that the matter be referred to the Attorney-General, with request that the district attorney be instructed by telegraph to represent the interests of the United States in the case, and to use all proper efforts to defeat the contemplated injunction. This request was complied with by the Department of Justice, which Department upon request of the Department of the Interior, had previously directed the institution of proceedings against parties upon Round Valley under section 2117, Revised Statutes.

October 27, 1887, General Howard telegraphed the War Department asking for instructions and stating that Captain Shaw's company of artillery had been sent to evict trespassers on Round Valley; that an injunction had been served on him which he had refused to obey, and that when he refused to surrender, an attachment was issued for him. October 28, 1887, the Secretary of War informed the Department of the Interior that the commanding general had been instructed to desist from declining to obey the writ until the question of jurisdiction should be determined by the Federal courts. October 29, 1887, the Secretary of War inclosed a telegram from General Howard, inquiring whether he should leave Captain Shaw to be arrested and imprisoned at the call of the trespassers, who have no rights whatever, in obedience to the orders of the local courts, and also asking that he and Captain Shaw be sustained. The Secretary of War requested advice as to what action was then needed to be taken by his Department.

November 4, 1887, report was made by this Office upon the foregoing facts, in which the following conclusion was reached:

In the present aspect of the case, I do not see that any further action on the part of this Department is practicable, at least until the injunction has been dissolved, and I therefore have the honor to recommend that copies of the papers be submitted to the Attorney-General, with the request that they be forwarded to the district attorney, with instructions to use every possible legal remedy to oust these parties and correct the extraordinary and disgraceful state of affairs at Round Valley, which has so long been a reproach upon all who are responsible for its continuance.

November 19, 1887, the Secretary of War transmitted a telegram from General Howard, stating that injunctions against Captain Shaw and himself had been transferred to the United States circuit court, and suggesting that as there was likely to be long delay before a decision would be had, the troops be withdrawn until next spring. November 29, 1887, report was made that in view of the fact that the matter was pending in the United States courts, and that the agent had been instructed by the district attorney to stay all proceedings, it was not seen how the military could accomplish any good by remaining on the reservation.

Thus ended the second attempt to regain possession of the reservation by military force.

The second attempt through the courts seems likely to result in a similar failure, if it has not already done so.

In a report dated October 7, 1887, District Attorney Carey referred to the injunction proceedings, and said:

It is simply disgraceful that the condition of affairs at that reservation has not been broken up and stopped long ago. The authority of the Government is defied, and the rights of the Indians absolutely ignored.

It is true there are complications about the matter, and legal impediments in the way of ejecting some of the trespassers, perhaps a number of them, and were they bona fide settlers who settled for the purpose, and with the view of purchasing the lands under the public land laws of the United States, it would be quite another matter; but the fact is, and well known and understood to be, that they had no other purpose in view than to usurp dominion over large tracts of public domain with the object of grazing their stock, and to maintain their dominion build a corral or cabin here and there.

The attempt of the act of March 3, 1873, to extend the boundaries of this reservation has been absolutely defeated by the course of these intruders, and I am informed not only resulted in the trespassers continuing in possession, but they infringe upon the limits of the old reservation and commit frequent depredations by way of killing the stock belonging to the reservation, and branding and virtually stealing the larger per cent. of the increase from the reservation cattle.

Later, in a report dated November 15, 1887, District Attorney Carey stated that he had had the several cases removed from the local courts to the United States circuit court, and said:

I am fearful of the result of the cases in the circuit court, owing to the decision of that court in the case of the United States *vs.* Charles H. Eberle, which was appealed to the Supreme Court of the United States and affirmed.

The case of Handy and Johnson will not come within the rule of the decision of the cases above cited, because whatever rights they may have were acquired as purchasers subsequent to the act of Congress passed March 3, 1873; but as to the other plaintiffs, I am informed that they were settlers upon and had improved public lands brought within the reservation by the provisions of said act of Congress prior to the passage of that act. Should the decisions of the court be adverse to the Government in this effort of eviction, there is but one clear way out of the difficulty, and it ought to be speedily resorted to, and that is to make the necessary appropriation, have the improvements appraised and the appraised value tendered therefor, as required by the provisions of the act hereinbefore cited.

The present condition of affairs, and that have existed so long, is a farce, and ought not to be tolerated longer.

Previous to the foregoing correspondence relative to the injunction proceedings, General O. O. Howard had, on the 14th of September, 1887, forwarded through the War Department a report on "the extraordinary and disgraceful state of affairs at the Round Valley Reservation," in which he reviewed the history of the reservation, the legislation in regard to it, the decisions of the courts, and the rights of the parties, and said:

These defendants and others, some of them without even the flimsy pretext of an assigned pre-emption or homestead claim, hold the whole, or about 100,000 acres of grazing land. Certainly the court did not so intend, neither did the Supreme Court mean to aid and abet this iniquity. Feeble efforts have been made from time to time to restrict and expel these trespassers, but they have always resulted in a complete failure, and why? One of the chief claimants, himself not an original settler, but one by purchase (his interest was acquired by inheritance), is an ex-member of Congress, and wealthy, and he has to aid him shrewder counsel than the friends of the Indians have had.

Except three persons, none of the occupants actually reside upon the reservation.

Most of the intruders have grown rich, arrogant, and insolent in their high-handed encroachments upon the land set apart for the exclusive use and benefit of the Indians. Congressional legislation looking towards a settlement has been defeated in committee. They want no settlement so long as they can have matters remain as they are, and why should they when such quasi-legal occupancy is vastly more remunerative than actual ownership? They graze annually some 30,000 head of sheep

upon the reservation, besides several thousand head of horses, cattle, and hogs. Their grazing land is stocked with all the animals it will maintain.

The agency cattle are driven off and the agency herder forbidden to "work" his cattle on their (?) ranges. The Government calves are boldly stolen and branded. One man has brazenly boasted to my aid-de-camp that he has stolen twelve calves a month from the agency, and this for years; and yet he is one of the smallest operators. * * * It is openly boasted that they have stolen the Government calves raised and fattened upon the reservation, and sold them to the Government to supply the Indians with beef. * * *

The iniquity perpetrated on this reservation is so glaring, so public, that it is demoralizing in its effects upon a larger community. It is imputed first to Congress, second to the courts, third to the Interior Department. * * *

I recommend new legislation, and that in it some other method be taken to compensate claimants and intruders than by continuing them and their herds within the boundaries of the reservation.

This report was corroborative of statements made in a letter from C. H. Eberle, dated September 18, 1887. As already stated, Mr. Eberle was one of the original settlers who obtained title to certain swamp lands and was paid for his improvements. He is not wholly free from the odium attaching to the early settlers in the valley, and for that reason his testimony is the more valuable. He is no longer an occupant of lands within the reservation. He referred to certain parties who, under a technicality of law, are, and for years to come may be, permitted, to enjoy a valuable franchise or monopoly, and to amass wealth, with entire exemption from taxation on money invested, simply because they have not been paid for a few paltry improvements scattered over a wide range of territory, and said:

The action of the Government is looked forward to with a great deal of interest, in regard to this whole matter. The Indian reservation in Round Valley has since its establishment been under the control of a corrupt ring of speculators, who have grown fabulously rich on the spoils. The Indian agents have been virtually owned by these men. * * * The plan of these parties has worked well thus far. They obtained title to the valley lands by the thousands of acres for a mere song. They have used nearly all of the reservation for fifteen years without a dollar's rent, and when a favorable opportunity offers, the last act of a well-matured plan will be consummated by getting an act passed by Congress similar to the act of March 3, 1873, curtailing the reservation to a few hundred acres, restoring the balance to the public domain, with the provision that occupants be permitted to enter 640 acres each as grazing lands at a nominal sum and, as before, secure title to all of their vast possessions by fraudulent entries through the dummies in their employ.

In the name of justice, in the name of thousands of worthy citizens who own no land, I emphatically and earnestly protest against the continuance of this gigantic monopoly of the Indian reservation by these parties. * * *

The action of President Cleveland and his cabinet in regard to the wrongful occupation of the public domain and the Indian reservation is a guaranty that such abuses will be no longer tolerated, and that all wrongs will be righted when properly understood.

December 14, 1887, this Office made to the Department a full report of this matter, substantially as herein set out. In conclusion the commissioner said:

I submit that a careful examination of the foregoing record will convince any disinterested person that this office, since the passage of the act of 1873 at least, has omitted no opportunity and left no means untried to rid the reservation of all white settlers not having absolute right and title therein.

The courts, however, have interfered, and by surprising decisions have thwarted any attempts that gave promise of success.

Congress has failed to respond to repeated calls for necessary legislation, and the War Department has apparently been thwarted by county courts and sheriffs.

This report was accompanied by the draft of a bill which had been presented to the Forty-ninth Congress. In submitting this bill to Congress, the President said:

The documents thus submitted exhibit extensive and entirely unjustifiable encroachments upon lands set apart for Indian occupancy, and disclose a disregard of

Indian rights so long continued, that the Government can not further temporize without positive dishonor.

Efforts to dislodge trespassers upon these lands have in some cases been resisted upon the ground that certain moneys due from the Government for improvements have not been paid. So far as this claim is well founded, the sum necessary to extinguish the same should be at once appropriated and paid. In other cases the position of these intruders is one of simple and bare-faced wrong-doing, plainly questioning the inclination of the Government to protect its dependent Indian wards, and its ability to maintain itself in the guaranty of such protection.

These intruders should forthwith feel the weight of the Government's power. I earnestly commend the situation and the wrongs of the Indians occupying the reservation named to the early attention of the Congress, and ask for the bill herewith transmitted careful and prompt consideration.

As stated in the last annual report, the bill passed the Senate June 25, 1888. It however failed to receive consideration in the House of Representatives.

No further action has been taken in the matter and no information received concerning the status of the suits referred to; but from District Attorney Carey's report of November 15, 1887, it would seem that even the slow process of the courts will grant little if any relief.

The legislation of 1873 was most unfortunate, in that it permitted occupants of the reservation, whether with or without legal or equitable rights, to remain until their improvements had been appraised and paid for. Under the decisions of the courts these occupants had the right to determine whether their improvements had all been appraised, and the tender made must be kept good until the case had been determined in court, which, under the Government system of accounting, is impracticable.

The agent reports that already the trespassers have gathered new courage and are preparing to attack the reservation to its full extent, which will necessitate the feeding of all the agency herd and horses through the winter or allowing them to starve. As he had only about one-tenth enough feed, it is probable that the latter result will ensue.

The temptation to these men to continue the occupation and to others to follow their example is great. Enough money to build a cabin and buy a branding-iron appears to be all the capital necessary to enable an occupant of the reservation to become wealthy. It is for the interests of these men to defeat all legislation looking to the payment of their paltry improvements, originally valued at some \$32,000, of which sum \$21,000 has been paid, while the occupancy of the reservation is estimated by an intelligent witness before the Senate committee to be worth \$34,125 per annum.

Whatever may be the result of the suits now pending, it is clear that the occupants of the lands covered by the former judgment of the court can not be dispossessed until they have been paid for all of their improvements, and that any successful attempt to eject the occupants of other lands will result in the first parties increasing their holdings and themselves occupying all the reservation.

Under conditions at present existing, nothing further can be done to restore the Indians to their possessions, and unless something is done by the next Congress it seems probable that the struggle to secure the Indians the land set apart for their use in 1856, and which has continued for over thirty years without any material result, will end in total failure.

The bill will be again prepared for submission to Congress at its next session, and although the history of the attempts heretofore made to secure legislation is full of discouragement, I trust that some action may be taken to enable the Department to remove in some degree the stigma

resting upon the Government on account of its failure to properly protect and defend its helpless and hapless wards. Without further legislation nothing will be accomplished, and the present "extraordinary and disgraceful state of affairs" will be continued for another generation.

AGREEMENT WITH THE SOUTHERN UTES IN COLORADO.

The fourth section of the act of May 1, 1881 (25 Stat., 133), provides as follows:

The Secretary of the Interior is hereby authorized to appoint a commission, consisting of three persons, with authority to negotiate with the band of Ute Indians of southern Colorado for such modification of their treaty and other rights, and such exchange of their reservation, as may be deemed desirable by said Indians and the Secretary of the Interior; and said commission is also authorized, if the result of such negotiations shall make it necessary, to negotiate with any other tribes of Indians for such portion of their reservation as may be necessary for said band of Ute Indians of southern Colorado if said Indians shall determine to remove from their present location; the report of said commission to be made to and subject to ratification by Congress before taking effect; and for this purpose the sum of ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated, which shall be immediately available.

Under this authority a commission, composed of Hon. J. M. Smith, of Wisconsin, R. B. Weaver, esq., of Arkansas, and Rev. Thos. S. Childs, of the District of Columbia, was appointed to negotiate with the Southern Utes. As the result of their labors an agreement was concluded on the 13th day of November, 1888, whereby said Indians cede to the United States all their right, title, and interest, in and to the Southern Ute Reservation, in the State of Colorado, and any lands elsewhere owned or claimed by them, and agree to remove to a reservation in the southeast corner of Utah described in the agreement as follows:

Commencing on the north bank of the San Juan River where said river crosses the line between Colorado and Utah; thence running north on said line 75 miles; thence running due west to the Colorado River; thence running southwesterly along the east bank of the Colorado River to the San Juan River where it empties into the Colorado River; thence running easterly along the north bank of the San Juan River to the place of beginning.

For and in consideration of the cession of their reservation in Colorado, and the relinquishment of any claims they may have to lands elsewhere, and their promise to remove to the new reservation provided for them in Utah, the United States is to pay the Indians (art. 3) \$50,000 in ten annual installments of \$5,000 each, the same to be divided per capita among them without regard to age or sex. The Government also agrees (art. 4) to give them \$20,000 worth of sheep as soon as they take up their residence on the new reservation, the sheep to be distributed per capita. Five of the chiefs are to receive a small money annuity, amounting altogether to \$2,000 (art. 5). Provision is also made for the establishment of an agency on the new reservation (art. 6). Permission is given the Indians to hunt on the unoccupied lands in and around the La Sal Mountains (art. 7). The provisions of existing treaties not inconsistent with the agreement are to remain in force (art. 9). Settlers who have not acquired rights binding upon the Government are to be removed from the new reservation (art. 10), and the improvements belonging to Indians on their present reservation in Colorado are to be sold for the benefit of the individual owners.

The agreement is signed by two hundred and fifty-three male Indians, being more than three-fourths of all the male Indians eighteen years of age and upwards belonging to the reservation. Besides these, the chiefs signed for twenty-four others represented to be of adult age and desiring to sign,

The agreement, report of the commission, and journal of its proceedings, and the proceedings of the several councils held with the Indians were transmitted to the Senate by the Department January 11, 1889, together with a draft of a bill to ratify said agreement, prepared in this office, all of which may be found printed in Senate Ex. Doc. No. 67, Fiftieth Congress, second session. The bill was introduced in the Senate, referred to the Committee on Indian Affairs, reported back with amendments, debated, amended, and passed the Senate February 25, 1889 (Cong. Record, Vol. 62, p. 2455).

In the House the bill was read a first and second time and referred to the Committee on Indian Affairs February 28, 1889 (Cong. Record, No. 64, p. 2576), but failed to receive further action.

SEMINOLES IN FLORIDA.

Miss Lily Pierpont, who was appointed a special agent November 16, 1888, to make further attempt to find lands for the Seminoles in Florida, and to settle them thereon, was unable to accomplish anything of importance, and early in July tendered her resignation by request.

Mr. Benjamin Schultz, of Punta Rosa, Fla., has been appointed by the Department to the same position, but it is not believed that anything of value can be accomplished for these people without the legislation authorizing negotiations for the purchase of lands which was requested in office report of March 30.

THE PROPOSED REMOVAL OF THE LEMHI INDIANS TO THE FORT HALL RESERVATION, IDAHO.

Under date of March 22, 1889, this office submitted to the Department the recommendation that a United States Indian inspector be sent to the Lemhi Agency, in Idaho, to negotiate with those Indians for the surrender of their reservation, and their consequent removal to the Fort Hall Reservation, as provided in the act of Congress approved February 23, 1889 (25 Stat., 637). Inspector F. C. Armstrong was sent to conduct the necessary negotiations, and in his report thereon, dated May 2, 1889, he states that after a careful presentation of the matter to the Indian council, not a single vote was cast in favor of the proposed removal.

It is to be regretted that these Indians would not consent to the contemplated action, as it would, in the opinion of this office, be greatly to their interest to leave the small and barren reservation at Lemhi and remove to the Fort Hall Reservation, where they could secure good homes and avail themselves of the benefits of the educational and other advantages provided for the Indians at that point.

As the act for the removal of these Indians takes effect only when approved by the President, after satisfactory evidence shall have been presented to him that the agreement therein set forth has been accepted by a majority of the adult male Indians upon the Lemhi Reservation, I am of the opinion that further negotiations should be had in the matter, and that the question should again be fully explained to them, in order that their consent may, if possible, be obtained.

A UNITED STATES COURT IN INDIAN TERRITORY.

A long-felt want in the Indian Territory was provided for when by an act of Congress, March 1, 1889 (25 Stat., 783), a United States district court was established at Muskogee, with an exclusive original criminal jurisdiction over all offenses against the laws of the United

States committed within the Indian Territory (as defined by the act) not punishable by death or by imprisonment at hard labor, and with a civil jurisdiction over all causes of action arising between citizens of the United States, or of any State or Territory, where the amount in controversy is \$100 or more.

It is confidently hoped that this court will be the means of disposing of many complicated and embarrassing questions that have been the source of much trouble and annoyance to this office and to the Department.

For full text of the act establishing this court, see page 442 of this report.

OKLAHOMA, INDIAN TERRITORY.

Since the date of the last annual report, the Secretary of the Interior, by and under the direction of the President, under authority of section three of an act of Congress approved March 3, 1885 (23 Stat., 384), entered into an agreement with the delegates of the Creek Nation on January 19, 1888, for a complete cession and relinquishment by the said Creek Nation to the United States of all their rights, title, and interest in and to the "entire western half of the domain of the said Nation lying west of the division line established by the treaty of 1866," subject to the ratification by the national council of the said Creek Nation and by the Congress of the United States; the consideration being \$2,280,857.10. The said agreement was ratified by the Creek council by an act approved January 31, 1889, and by Congress by an act approved March 1, 1889 (25 Stat., 757).

By section 12 of the Indian appropriation act, approved March 2, 1889 (25 Stat., 1004), the sum of \$1,912.02 was appropriated to pay the Seminole Nation of Indians in full for all right, title, interest, and claim which the said nation had in and to certain lands ceded by article 3 of the Seminole treaty of 1866 (14 Stat., 755), upon the condition that the said Indians should make a complete release and conveyance to the United States of all their said right, title, interest, and claim in and to the said lands. In pursuance of this provision of law, the Seminole Nation, by its duly authorized delegates, executed a release and conveyance, bearing date March 16, 1889, of the land in question, which was duly approved and delivered as required by the act.

The lands thus released and conveyed, with those ceded by the Creeks as above described, form what is known as the "Oklahoma country."

In accordance with the provisions of section 3 of the said Indian appropriation act the President, by a proclamation dated March 23, 1889, declared that the said Oklahoma lands would be, at and after the hour of noon on the twenty-second day of April following, open to settlement under the terms of and subject to all the conditions, limitations, and restrictions contained in the said act and the laws of the United States applicable thereto.

The Oklahoma country having thus become a part of the public domain, and having been opened to public settlement, the jurisdiction of the Indian Office over it has ceased, and it is now under the control of the General Land Office.

DISPUTED CITIZENSHIP IN THE CHEROKEE NATION, INDIAN TERRITORY.

In the last annual report of this office the belief was expressed that the plan provided by the Department in the determination of the Kesterson case, might be executed without friction, and the question of

alleged intrusions in the Cherokee Nation by certain persons claiming citizenship therein would thus be satisfactorily disposed of.

In this case the Department determined (1) that it would accept the decision of the Cherokee authorities against claimants as fixing their status as intruders in that nation, to be dealt with in accordance with the provisions of article 27 of the treaty of 1866 (14 Stat., 806); but (2) that those claimants who entered the Cherokee Nation in good faith, believing they had right there by blood, must be dealt with as intruders, in the light of the facts in each particular case, and reasonable time and opportunity must be given each one (in view of all the circumstances of residence and labor there) to dispose of or remove his property; and (3) that there exists no right in the Cherokee authorities to exercise jurisdiction over the person or property of those claimants who are, by the action of said authorities, declared to be intruders, and that the Department can alone effect the removal of such intruders.

It has appeared from complaints received in this office that many of such claimants, who have been notified to dispose of their improvements in the Cherokee Nation and remove therefrom, have attempted to comply with said notification, but have been unable to do so for the reason that the Cherokees, who alone can be purchasers, have been disposed to take advantage of the unfortunate circumstances which necessitated a forced sale and have refused to pay a fair consideration for the improvements. Therefore none of this class of claimants have been removed, and under date of March 11, 1889, the Union Indian agent was directed by telegraph to take no steps looking to the removal of any of them until further orders from this office.

Notwithstanding that the position taken by this Department on the subject is known to the authorities of the Cherokee Nation, many cases have been called to the attention of this office wherein the said authorities have attempted to force the removal of some of these claimants, without giving them a fair compensation for their property, by selling their improvements at auction under the laws of the Cherokee Nation.

In a report of June 7, 1889, my predecessor submitted to the Department a full history of this question, the manner in which it arose, and the position taken thereon by this office and the Department.

I trust that some means may be adopted for an early settlement of this long-standing and vexed question which will be just and also satisfactory alike to the claimants and to the Cherokee people.

FREEDMEN, DELAWARES, AND SHAWNEES IN THE CHEROKEE NATION, INDIAN TERRITORY.

By an act of Congress, approved March 3, 1883 (22 Stat., 624), the sum of \$300,000 was appropriated to be paid into the treasury of the Cherokee Nation, in the Indian Territory, out of the funds due under appraisalment of Cherokee lands west of the Arkansas River, the said sum to be expended as the Cherokee legislature should direct.

Under this authority the Cherokee legislature enacted that this amount should be disbursed per capita to such citizens of the said nation as were Cherokees by blood, thus excluding from any participation therein the freedmen, Delaware, and Shawnee members of said nation. In order to secure to the said freedmen, Delawares, and Shawnees a per capita payment equal in amount to that received by the Cherokees by blood, an additional sum of \$75,000 was appropriated from the same funds by the act of Congress approved October 19, 1888 (25 Stat., 609), and in order to enable the Secretary of the Interior to determine who of the said freedmen, Delawares, and Shawnees are entitled to share

in the said payment, an additional sum of \$5,000 was appropriated by the act of Congress approved March 2, 1889 (25 Stat., 994).

Under the authority conferred in the latter act, Mr. John W. Wallace, of Colorado, was appointed by the Secretary of the Interior to prepare a roll containing the names of all persons whose right to share in the said appropriation is admitted by the Cherokee Nation, to be known as the "Roll of Admitted Claimants," and also a roll containing the names of such as claim the right to share in the said money, whose claims are contested by the Cherokee Nation, to be known as the "Roll of Contested Claimants." In connection with the latter roll he is directed to take testimony and report to the Department relative to the claim of each person so enrolled.

Mr. Wallace is now on duty in the Indian Territory, under his appointment.

FREEDMEN IN THE CHICKASAW NATION, INDIAN TERRITORY.

Reference was made in the last Annual Report to a draught of a bill for the relief of the freedmen in the Chickasaw Nation, which was submitted to Congress by the Department May 9, 1888. (Senate Ex. Doc. 166, Fiftieth Congress, second session.) The bill provided for the removal of such of said freedmen as should consent thereto from the Chickasaw Nation to lands ceded to the United States in 1866 by the Creeks and Seminoles, known as the "Oklahoma Country."

This bill did not become a law, and by the cession of said lands to the United States and their appropriation for homestead purposes, the relief contemplated has become impracticable.

As the unfortunate condition of these people still exists, the subject will be further considered, with the view of maturing some other plan for their relief.

SALE OF IOWA AND SAC AND FOX RESERVATIONS IN KANSAS AND NEBRASKA.

As the survey of the Iowa Reservation, although made in the field, has not been approved by the General Land Office, no further steps toward the allotment, appraisement, and sale of the lands have been taken since the date of the last annual report. It is hoped that the survey of this reservation, which contains about two-thirds of a township, may be completed in time to enable this office to carry out the provisions of the act of March 3, 1885 (23 Stat., 351), and January 26, 1887 (24 Stat., 367), during the spring of 1890.

Special Agent Gordon was instructed, July 19, 1889, to again present to the Sac and Fox of the Missouri Indians the said acts for their final acceptance or rejection. September 9, 1889, he submitted his report, from which it appears that at a full council of the Indians the proposition to sell their lands under the provisions of said acts of March 3, 1885, and January 26, 1887, was unanimously rejected. They also refused to take allotments in severalty under the provisions of said acts.

Special Agent Gordon expresses the opinion that these Indians could be induced to take allotments in severalty if they could be assured that their lands could be equally divided between the men, women, and children. They do not regard the general allotment act as fair or equitable, as it makes no provision for married women, and discriminates between a person eighteen years of age and one but a month or two younger. They regard an equal division of the lands among all the members of the tribe as the only just plan.

OLD CAMP M'GARRY MILITARY RESERVATION, NEVADA.

The attention of this office was invited by the surveyor-general of Nevada to the fact that certain Indians are located upon sections 19, 20, 29, and 30, T. 42 N., R. 26 E., Mount Diablo meridian, that State; that they have occupied and cultivated these lands for some fifteen years; and that they now desire to secure the same as homes for themselves and families.

Upon inquiry at the General Land Office, this office ascertained that these lands are embraced within the old Camp McGarry military reservation; that they have been surveyed, and that the survey has been regularly approved and accepted by the General Land Office; that the said military reservation was relinquished by the War Department March 25, 1871, and that provision was made for its disposal under the act of Congress approved February 24, 1871 (16 Stat., 430); but that no action as yet has been taken in the matter of appraisement of the lands in question, to the end that they may be disposed of under that act, and one of July 5, 1884 (23 Stat., 103), for the reason that as there are no Government improvements of value thereon the lands appear to be of no more value than ordinary lands in that vicinity; and that recommendation has been made for the necessary legislation, by which the lands may be disposed of under the homestead and pre-emption laws, and a saving thereby be effected to the Treasury of the expenses of appraisement and advertising under existing laws.

In view of the fact that the Indians referred to have long occupied and cultivated these lands, and to the end that they may secure title thereto as permanent homes, legislation should be had authorizing the allotment of the lands in severalty to the Indians, under the fourth section of the general allotment act, approved February 8, 1887 (24 Stat., 388).

I shall take occasion to make a special report on this subject.

SAN JUAN RIVER SETTLERS—NAVAJO RESERVATION, NEW MEXICO.

A clause in the Indian appropriation act approved June 29, 1889 (25 Stat., 231), provides as follows:

The sum of ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated to enable the Secretary of the Interior to pay the settlers who, in good faith, made settlement in township twenty-nine north, ranges fourteen, fifteen, and sixteen west of the New Mexico principal meridian, in the Territory of New Mexico, prior to May first, eighteen hundred and eighty-six, for their improvements and for damages sustained by reason of the inclusion of said townships within the Navajo Reservation by Executive order of April twenty-fourth, eighteen hundred and eighty-six, and such settlers may make other homestead, pre-emption, and timber-culture entries as if they had never made settlements within said townships.

By direction of the Department an investigation of the claims of settlers under this law was made by a special agent of this Bureau (George W. Gordon) in May last. His report and findings, with one exception, were approved by the Department September 2, 1889, and the fund will be distributed to claimants accordingly.

BOUNDARIES OF THE WARM SPRINGS RESERVATION, OREGON.

The question of the disputed location of the northern boundary of this reservation, to which reference was made in the last annual report, was finally determined by the Department, July 19, 1889, by the adoption of the line as surveyed by John A. McQuinn in 1887, this be-

ing the line insisted upon by the Indians as being in accordance with the provisions of their treaty.

Directions have been given for the survey of the western boundary of the reservation.

TIMBER OPERATIONS ON RESERVATIONS IN WISCONSIN.

La Pointe Agency.—As indicated in the last annual report, full instructions were given Agent Gregory, October 29, 1888, regarding the sale of pine timber on the reservations under his charge, said instructions containing the following clause:

It must be distinctly understood that no operations can be commenced until you are notified that the contract has been approved by this office, and that no contracts should be made for the sale of timber upon tracts where the allotments have not been approved by the President.

He had previously (October 22, 1888) been instructed by telegraph as follows:

Forward to-day all contracts between Indians and contractors for cutting timber that are on file in your office or under your control, and which have not been approved by this office. You may permit cutting under all contracts that have been heretofore submitted and approved in due form, and which have not been fully performed; but you must permit no timber to be cut under any contract that has not been thus submitted and approved.

On the same day Agent Gregory telegraphed those having such contracts as follows:

You can go on and complete your last winter contracts.

December 3, 1888, the Department modified the then existing regulations regarding the sale of pine timber, and a form of renewal of incomplete contracts was prepared and forwarded to Agent Gregory December 5, 1888, as indicated in the last annual report. December 8, 1888, a form of new contract for the sale of pine timber was prepared and forwarded to Agent Gregory, he being again instructed as follows:

Permit *no operations to be commenced* on any tract until you receive notice of the approval of a contract covering the same.

Soon thereafter complaint was made to this office on behalf of the Fond du Lac Indians that Patrick Hynes and Andrew Gowan, having contracts executed the previous season, but unapproved by this office, which contracts it was alleged had been obtained by fraud, were then making preparations to enter upon their lands and carry away their timber without their consent. Subsequently, repeated instructions were given Agent Gregory to prevent the cutting of timber, particularly on the Fond du Lac Reservation, and on allotments not approved by the President.

January 26, 1889, late Commissioner Oberly made a full report upon the subject to the Department, in which he stated that—

No contracts for cutting on any of the reservations of the La Pointe Agency have been approved by this office (with the exception of seven, the approval of which has not been made known either to the parties or Agent Gregory), so that any cutting of timber on these reservations is without authority of this office and the Department, which both the agent and the contractors seem to have entirely ignored.

He recommended the reference of the matter to the Department of Justice, with the request that the proper district attorney be instructed to commence proceedings against all parties who had violated the statutes, and that the opinion of the Attorney-General be requested as to the legal means that might be used to protect the interests of the

allottees whose timber had been cut without their consent. In conclusion, he called attention to the many hardships and the probable financial ruin, that might be entailed upon those parties who had been cutting under the impression that they had the right to do so under Agent Gregory's authority, and suggested that he be authorized to ascertain the contractors who had been cutting under these circumstances and to relieve them of the effects of Agent Gregory's failure in his duty, by permitting them to continue to cut under their contracts, and to remove the timber which had been already cut under such contracts.

January 29, 1889, late Secretary Vilas expressed the opinion that operations which had been begun in fulfillment of contracts upon approved allotments, should be permitted to be resumed, subject to the approval of the contracts thereafter, with such modifications as to price as might be found necessary.

Subsequently (February 14, 1889), the Department authorized an investigation by Special Timber Agent W. A. Roberts, and Mr. J. F. Allen of this office, into the fairness and reasonableness of the prices stipulated in the contracts, and as to whether any timber had been cut upon lands not allotted to Indians, or where allotments had not been approved; and, if so, the amount cut on each tract, the persons by whom the cutting was done, the reasons or excuses for the trespassing, etc.

This investigation was duly made, and as a result thereof some 211 contracts for the sale of pine timber on the Lac Court d'Oreilles, Bad River, and Lac du Flambeau Reservations were approved by my immediate predecessor in April last. Full settlement has been made under these contracts, of which the following is a detailed statement.

TABLE 14.—*Showing quantity of timber cut in 1888-'89 on reservations attached to the La Pointe Agency, Wis., under approved contracts, etc.*

Reservations.	No. of feet.	Contract price.	One-half cost scaling.	Amount paid Indians, net.	Advances made Indians in cash and merchandise.	Cash paid to Indians in settlement.
Bad River	21,458,058	\$37,506.71	\$1,391.27	\$36,115.44	\$13,298.25	\$22,817.19
Lac du Flambeau	24,115,360	48,932.05	1,198.19	47,733.86	19,593.12	28,140.74
Lac Court d'Oreilles	25,183,025	60,692.63	738.29	59,954.34	24,201.26	35,753.08
	70,756,443	147,131.39	3,227.75	143,803.64	57,092.63	\$6,711.01

The average net price per 1,000 feet was \$2.03, against \$2.25 received the preceding year. The falling off in price was due to fact that the quality of much of the timber was inferior, and also that it was taken from lands that had been cut over several times previously.

Some 13,000,000 feet of pine timber was cut on the Fond du Lac Reservation by Messrs. Hynes and Gowan, for all of which they had contracts for the season of 1887-'88, which had been approved by the agent but not by this Office. Said contracts had expired by limitation, and with two or three exceptions were not renewed by the Indians for the season of 1888-'89. In many cases, however, advances were made which they accepted. With ten exceptions, the allotments from which this timber was cut had neither been approved by the President, nor by this Office.

March 19, 1889, Special Agent R. S. Gardner was directed to take charge of the La Pointe Agency, and on the next day instructions were given him looking to the protection of the interests of the Government and the Indians in the matter of the timber upon reservations.

April 8, 1889, he reported that suit had been commenced in the United States circuit court for the district of Minnesota against Patrick Hynes for 6,145,839 feet of timber, valued at \$43,020.87; that the defendant intended to give bond and retain the property, to await the result of litigation, and that this action of replevin would be tried at the June, 1889, term of the circuit court. He also reported that some 3,500,000 to 4,000,000 feet of timber cut by Hynes and Gowan was skidded in the woods, concerning which no action had been taken.

May 25, 1889, report was made to the Department upon a proposition for compromise submitted by W. A. Rust, esq., in behalf of Mr. Hynes, by which he agreed to pay \$2 or \$2.50 per thousand for the timber cut, which proposition, as stated by the Attorney-General, under date of June 15, 1889, has been referred to the Solicitor of the Treasury for his proper action. I have no later information upon the subject.

On the Bad River Reservation no timber was cut except under duly approved contracts.

On the Lac Court d'Oreilles Reservation 1,767,070 feet, valued at \$2,798.51, was cut from patented lands, contracts for which were not submitted to this Office. The sum of \$2,050.02 was paid to the patentees, and \$951.29 is still due. Five million six hundred and twenty-five thousand five hundred and seventy feet, valued at \$13,715.19, was also cut on unallotted lands, which lands, however, had been selected by the Indians, and their selections recorded in the farmer's books. No contracts for this timber were submitted to this Office. The sum of \$5,947.96 has been paid to the Indians who selected the lands, and the sum of \$7,804.33 remains unpaid. The amounts unpaid on these two items were tendered by the contractors or trespassers to Special Agent Gardner, who declined to receive them.

Special report was made upon the subject July 3, 1889, and a supplemental report August 19, 1889. The question as to whether payment shall be accepted for this timber so cut, or whether the parties shall be proceeded against as trespassers, is now pending before the Department.

Report was made by Special Agent Gardner, June 15, 1889, regarding operations on the Lac du Flambeau Reservation, from which it appears that a few cases of trespass occurred, for which settlement has not been made in full. Special report will be made in this matter as soon as the decision of the Department on the Lac Court d'Oreilles cases is communicated to this office.

Under the date of July 24, 1889, Agent Leahy, of the La Pointe Agency, transmitted to this office a petition from the chiefs and principal men of the Bad River Indians, asking permission to sell their pine timber, and also a petition of applicants for eighty-acre allotments, praying that their applications be granted. Agent Leahy made the following statements in reference to these requests:

Heretofore contracts for the sale of timber have been executed, advances made by the contractors to the Indians, and logging operations actually begun before either the allotment or contract had received the approval of the Indian office.

From the experience of last winter the loggers and jobbers have learned that this course will no longer be permitted by the Indian department. Desirous of avoiding the complications growing out of the irregular methods pursued heretofore in the prosecution of lumbering enterprises on the Indian reservations, the contractors will have nothing to do with Indian contracts for the sale of logs or stumpage until all the prerequisites of the Indian office have been fulfilled.

Heretofore the Indian has obtained at this season of the year, a large share of his subsistence from the contractors, in the way of advances on contracts for the sale of timber to be cut and hauled during the coming fall and winter. The contractors, apprehensive of the future, will make no more advances to the Indian unless his contract has been ratified by the Indian office.

Logging operations begin in this region in September, and in order to enter upon the work with a reasonable prospect of success, the necessary arrangements for the winter's operations should not be postponed beyond the 15th of September. All contracts for the sale of Indian timber should be approved prior to this date; those approved later will not be available for next winter's work.

The Indian is proverbially improvident, thinking only of the present and paying little heed to the morrow. Those residing on reservations on which logging enterprises have been carried on for a number of years, have lived abundantly, even sumptuously, on the proceeds of pine timber sold and the liberal wages paid to them in the logging camps. Many of the Indians, their money spent and advances by the contractors refused, find themselves destitute, and their families suffering for the bare necessities of life. Under this pressure they find their way to this office, and with an eloquence that would grace a higher forum they urge upon the agent the necessity of having allotments made and contracts approved in season for next winter's operations; they say that if the cutting and sale of timber on the reservations be suspended they will have nothing to do next winter, and many of them must suffer for food and clothing; that several of them have secured, at great expense, horses and oxen to work in the woods during the winter, and that they will not be able to feed these animals unless they are engaged in the work of lumbering; that in the absence of the work these animals will be sold at a fraction of their cost, their value depending chiefly upon the work of hauling the product of the forest to the landings, whence they are shipped by rail and water to distant parts. I have no reason to doubt the correctness of these statements. It is clear that unless these Indians are able to obtain employment during the coming winter as they have been accustomed for several years, many of them must be supported by the Government or they will perish for want of food.

Special report was made upon the subject August 13, 1889, with which the following draft of rules and regulations was submitted:

(1) Any Indian holding a patent for land, or whose allotment has been approved by the President, may sell the pine timber on such land, and any responsible contractor may purchase the same, the price per 1,000 feet to be mutually agreed upon to be satisfactory to the United States Indian agent and the Commissioner of Indian Affairs, and to be paid in cash.

(2) All contracts must be properly executed, and, accompanied by a good and sufficient bond with two or more approved sureties, be filed with the Indian agent in time for their receipt in the Indian Office on or before September 15, 1889.

(3) No operations of any kind will be allowed as to any tract until the contractor is notified that the contract for the sale of timber on such tract has been approved by the Commissioner of Indian Affairs.

(4) Any cutting of timber on lands not covered by approved contracts will be regarded as willful trespass, and the offender prosecuted under section 5388 of the Revised Statutes.

(5) In the final settlement under the contracts, no allowance will be made for advances to any Indian, unless such advances are made with the written approval of the farmer in charge of the reservation to which the Indian belongs.

(6) In case the amount due any Indian at the close of the logging season exceeds the sum of \$300, the contractor will be required to pay the amount so due to the United States Indian agent for deposit in some national bank to the credit of the Indian to whom it is due, with condition that the money is to be drawn out only upon check signed by such Indian, and countersigned by the United States Indian agent, unless special exception be made by the Indian Office.

(7) All contracts must be in form as prescribed by the Indian Office, and all provisions thereof, including that which requires the employment of Indian labor on equal terms, whenever suitable, will be strictly enforced.

(8) Approval of any contract will be subject to the foregoing rules and regulations.

These rules and regulations are designed to meet the views of the Senate Committee on Indian Traders, as expressed in the following resolution adopted August 10, 1888:

That no further sales from pine timber from allotted lands should be allowed until after rules and regulations specifically and accurately defining and prescribing the terms and conditions of such sales, and adequately protecting the Indians both during the making and the performance of the contracts, and in the disposition of the money received from such contracts, have been adopted by the Secretary of the Interior and publicly promulgated.

In the event of the approval of these rules and regulations by the

Department, it is not expected that any very extensive operations will be conducted during the coming season, as but little timber is left on the allotted lands.

The question of the disposition of the timber on the unallotted lands of these reservations, as well as the disposition of the lands themselves, is an important question that should be considered during the coming session of Congress, with a view to such legislation as may be required to secure the greatest benefit to the Indians.

The correspondence on file and of record in this office upon the subject of timber operations at the La Pointe Agency, from their commencement in 1882 to February 9, 1889, will be found in the report of the Senate Committee on Indian Traders. [Senate Report No. 2710, Fiftieth Congress, second session.]

Green Bay Agency.—At the time the last annual report of this Office was submitted to the Department the honorable Secretary had refused to allow Indians to market dead and down timber from reservations the title to which is in the United States, basing his action on an opinion of the Attorney-General that such logging was not authorized by existing law. In that report it was stated that the necessary steps would be taken at an early day to bring the matter to the attention of Congress, so that legal authority might be obtained for the marketing of this grade of timber from all Indian reservations established by law.

Therefore, under the date of January 7, 1889, a full report was made by this office to the Department explaining the circumstances of the Menomonees, their past logging operations, the excellent use they had hitherto made of the proceeds, their dependence on the sale of this class of timber for remunerative labor, the perishable nature of this property, and the great and irreparable injury they would suffer by being denied the right to continue this work. It was also explained that several other tribes would suffer in a similar manner if this right was denied to them, and earnest recommendation was made that the whole subject be laid before Congress with the hope that early and favorable action would be taken.

Upon the urgent representations made by the Secretary in his annual report, and in compliance with this request, Congress passed the following act, which was approved February 16, 1889 (25 Stat., 673):

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States may from year to year, in his discretion, under such regulations as he may prescribe, authorize the Indians residing on reservations or allotments the fee of which remains in the United States to fell, cut, remove, sell, or otherwise dispose of dead timber standing or fallen on such reservation or allotment for the sole benefit of such Indian or Indians. But whenever there is reasonable cause to believe that such timber has been killed, girdled, or otherwise injured for the purpose of its sale under this act, then in that case such authority shall not be granted.

In pursuance of the provisions of this act, the office, under date of February 23, 1889, recommended to the Department that the President be requested to grant the Menomonees the privilege of marketing their dead timber, and explained that the Indians had never been accused of burning, girdling, or otherwise injuring the timber on their reservations for the purpose of disposing of it as dead timber, and that there was no reason to believe that they would do so, as they know that green timber is much more valuable than dead timber, and they believe that at no very distant day they will reap the benefit of the sale of all the timber which they own; and that, moreover, if such bad faith on their part was feared, it could be effectually prevented by prescribing suitable regulations under which alone they would be allowed to engage in logging.

In compliance with this recommendation, the President, under date of March 2 and 8, 1889, granted the necessary authority for the Menomonees to market their dead and down timber under the following regulations, viz.:

(1) That each Menomonee who engaged in the work of preparing the dead and down timber on their reservation during the current year, provide his own logging outfit and supplies.

(2) No one to be allowed to log who has children of school age not attending school a reasonable length of time each year, unless, in the opinion of their agent, some good reason exists in special cases, which are sufficient to exempt particular persons from this requirement; otherwise, every Indian on the reservation not well employed, should be permitted and encouraged to engage in the work, and no favoritism shall be shown by the agent in his management of the business.

(3) A reliable and otherwise properly qualified white man to be detailed, if any such can be spared from the agency employé force, or if no regular agency employé is available, then to be appointed by authority of the Department and to be paid a reasonable salary from the proceeds of the logs, for such time as services may be actually necessary, whose duty it will be to go into the woods with the loggers, and superintend and direct their labors, to the end that no green or growing timber may be cut, and that no live trees are damaged in any manner, so as to cause them to die, that they may be marketed under the provisions of the act in question.

(4) One-half of the cost of scaling to be paid for by the loggers and one-half by the purchaser of the logs.

(5) The logs shall be cut and banked or otherwise made ready for sale at such place or places and in such manner as the agent shall direct, and shall be sold at auction to the highest bidder in such lots as shall be most expedient, and under the personal direction of the agent, for cash, after at least two weeks' notice by publication in newspapers at the place where the usual markets for logs exist, and where best calculated to give notice; also by such other means as shall give greatest publicity.

(6) No sale of the logs to be valid, until approved by the Commissioner of Indian Affairs.

(7) Ten per cent. of the gross proceeds derived from the sale of the logs to go to the stumpage or poor fund of the tribe, from which the old, sick, and otherwise helpless are supported and their hospital maintained.

(8) All expenses, such as advertising, telegraphing, one-half of the cost of scaling, and ten per cent. of the gross proceeds of the sale, for the stumpage or poor fund, to be first deducted, and the net proceeds remaining, to be divided and paid by the agent to the individuals or companies of the tribe in exact proportion to the scale of the logs banked by each.

Unfortunately this authority was received too late in the season for any logging to be done thereunder; but the Menomonees were not altogether idle during the winter, for, under the decisions of the courts on the subject, they are entitled to clear land on their reservation for purposes of cultivation. They accordingly turned their attention to that work, and when spring opened they had on the banks of the Oconto and Wolf Rivers over eighteen million feet ready for sale.

As this had been growing timber when cut, the manner of its sale was not necessarily governed by the regulations prescribed by the President in regard to dead and down timber. Therefore, believing that better prices and a more satisfactory sale could be secured by advertising for sealed bids to be accompanied by certified checks of \$500 each, this mode of sale was adopted, very fair prices were obtained, and the Indians were well pleased with the result.

The season's work netted the Indians more than \$138,000, after all expenses had been paid, and after 10 per centum of the gross proceeds (over \$15,000) had been deposited in the United States Treasury to the credit of their stumpage or poor fund.

At the outset very clear and imperative instructions were given the agent to see that the law was not evaded, and that not an acre should be thus cleared without a bona fide intention of cultivating the same. But fears were entertained by this office that more of this timber had been cut than was actually necessary to clear land for cultivation, and

therefore a special Indian agent was directed to proceed to the reservation and to make a careful and thorough investigation.

He reported in substance that after having spent several days in going over the ground from house to house, he was much surprised at the amount of work done, the progress made in farming, and the other evidences of civilization which were directly traceable to the permission granted the Indians to sell their surplus timber; that their best land, indeed almost all that is fit for cultivation, is still, or has been until very lately, covered with timber; that they had cleared in good faith about 600 acres, which was all being cultivated, some promising a good crop for this season, the balance being cleared from brush, etc., and prepared as fast as possible for seeding this fall; and he expressed the hope that the Indians would be allowed to continue this work until they should have cleared of timber as much of this arable land as they can cultivate.

All reports agree that the Indians make fully as good use of the proceeds of their logs as would any white community. After paying for their supplies they expend the greater part of what is left in the purchase of wagons, harness, stock, seeds, and agricultural implements, and in the repair, improvement, and erection of dwelling-houses.

In compliance with their request, the President, under date of September 20, 1889, authorized the Monomonees to bank, for sale, dead and down timber during the coming season.

The Oneida Indians, who are under the care of the same agency as the Menomonees, have asked to be allowed to market dead and down timber from their reservation this winter, but the agent advises against it for several reasons, the principal reason being that it might complicate the work now in progress of allotting to them their land in severalty.

Very respectfully, your obedient servant,

T. J. MORGAN,
Commissioner.

The SECRETARY OF THE INTERIOR.

SUPPLEMENTAL REPORT ON INDIAN EDUCATION.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, December 1, 1889.

SIR: I respectfully submit herewith a supplement to the foregoing report, in which I have outlined a plan for Indian education. When the regular annual report of this office was submitted, I had not at hand the data necessary for formulating such a plan and hence could not present it at that time. This plan, of course, is subject to modifications, as experience may show them to be desirable.

Very respectfully, your obedient servant,

T. J. MORGAN,
Commissioner.

The SECRETARY OF THE INTERIOR.

A SYSTEM OF EDUCATION FOR INDIANS.

GENERAL PRINCIPLES.

The American Indians, not including the so-called Indians of Alaska—are supposed to number about 250,000, and to have a school population (six to sixteen years) of perhaps 50,000. If we exclude the five civilized

tribes which provide for the education of their own children and the New York Indians, who are provided for by that State, the number of Indians of school age to be educated by the Government does not exceed 36,000, of whom 15,000 were enrolled in schools last year, leaving but 21,000 to be provided with school privileges.

These people are separated into numerous tribes, and differ very widely in their language, religion, native characteristics, and modes of life. Some are very ignorant and degraded, living an indolent and brutish sort of life, while others have attained to a high degree of civilization, scarcely inferior to that of their white neighbors. Any generalizations regarding these people must, therefore, be considered as applicable to any particular tribe with such modifications as its peculiar place in the scale of civilization warrants. It is certainly true, however, that as a mass the Indians are far below the whites of this country in their general intelligence and mode of living. They enjoy very few of the comforts, and almost none of the luxuries, which are the pride and boast of their more fortunate neighbors.

When we speak of the education of the Indians, we mean that comprehensive system of training and instruction which will convert them into American citizens, put within their reach the blessings which the rest of us enjoy, and enable them to compete successfully with the white man on his own ground and with his own methods. Education is to be the medium through which the rising generation of Indians are to be brought into fraternal and harmonious relationship with their white fellow-citizens, and with them enjoy the sweets of refined homes, the delight of social intercourse, the emoluments of commerce and trade, the advantages of travel, together with the pleasures that come from literature, science, and philosophy, and the solace and stimulus afforded by a true religion.

That such a great revolution for these people is possible is becoming more and more evident to those who have watched with an intelligent interest the work which, notwithstanding all its hindrances and discouragements, has been accomplished for them during the last few years. It is no longer doubtful that, under a wise system of education, carefully administered, the condition of this whole people can be radically improved in a single generation.

Under the peculiar relations which the Indians sustain to the Government of the United States, the responsibility for their education rests primarily and almost wholly upon the nation. This grave responsibility, which has now been practically assumed by the Government, must be borne by it alone. It can not safely or honorably either shirk it or delegate it to any other party. The task is not by any means an herculean one. The entire Indian school population is less than that of Rhode Island. The Government of the United States, now one of the richest on the face of the earth, with an overflowing Treasury, has at its command unlimited means, and can undertake and complete this work without feeling it to be in any degree a burden. Although very imperfect in its details, and needing to be modified and improved in many particulars, the present system of schools is capable, under wise direction, of accomplishing all that can be desired.

In order that the Government shall be able to secure the best results in the education of the Indians, certain things are desirable, indeed, I might say necessary, viz:

First. Ample provision should be made at an early day for the accommodation of the entire mass of Indian school children and youth. To resist successfully and overcome the tremendous downward pressure

of inherited prejudice and the stubborn conservatism of centuries, nothing less than universal education should be attempted.

Second. Whatever steps are necessary should be taken to place these children under proper educational influences. If, under any circumstances, compulsory education is justifiable, it certainly is in this case. Education, in the broad sense in which it is here used, is the Indian's only salvation. With it they will become honorable, useful, happy citizens of a great republic, sharing on equal terms in all its blessings. Without it they are doomed either to destruction or to hopeless degradation.

Third. The work of Indian education should be completely systematized. The camp schools, agency boarding schools, and the great industrial schools should be related to each other so as to form a connected and complete whole. So far as possible there should be a uniform course of study, similar methods of instruction, the same textbooks, and a carefully organized and well-understood system of industrial training.

Fourth. The system should be conformed, so far as practicable, to the common-school system now universally adopted in all the States. It should be non-partisan, non-sectarian. The teachers and employés should be appointed only after the most rigid scrutiny into their qualifications for their work. They should have a stable tenure of office, being removed only for cause. They should receive for their service wages corresponding to those paid for similar service in the public schools. They should be carefully inspected and supervised by a sufficient number of properly qualified superintendents.

Fifth. While, for the present, special stress should be laid upon that kind of industrial training which will fit the Indians to earn an honest living in the various occupations which may be open to them, ample provision should also be made for that general literary culture which the experience of the white race has shown to be the very essence of education. Especial attention should be directed toward giving them a ready command of the English language. To this end, only English should be allowed to be spoken, and only English-speaking teachers should be employed in schools supported wholly or in part by the Government.

Sixth. The scheme should make ample provisions for the higher education of the few who are endowed with special capacity or ambition, and are destined to leadership. There is an imperative necessity for this, if the Indians are to be assimilated into the national life.

Seventh. That which is fundamental in all this is the recognition of the complete manhood of the Indians, their individuality, their right to be recognized as citizens of the United States, with the same rights and privileges which we accord to any other class of people. They should be free to make for themselves homes wherever they will. The reservation system is an anachronism which has no place in our modern civilization. The Indian youth should be instructed in their rights, privileges, and duties as American citizens; should be taught to love the American flag; should be imbued with a genuine patriotism, and made to feel that the United States, and not some paltry reservation, is their home. Those charged with their education should constantly strive to awaken in them a sense of independence, self-reliance, and self-respect.

Eighth. Those educated in the large industrial boarding-schools should not be returned to the camps against their will, but should be not only allowed, but encouraged to choose their own vocations, and contend for the prizes of life wherever the opportunities are most favor-

able. Education should seek the disintegration of the tribes, and not their segregation. They should be educated, not as Indians, but as Americans. In short, the public school should do for them what it is so successfully doing for all the other races in this country, assimilate them.

Ninth. The work of education should begin with them while they are young and susceptible, and should continue until habits of industry and love of learning have taken the place of indolence and indifference. One of the chief defects which have heretofore characterized the efforts made for their education has been the failure to carry them far enough, so that they might compete successfully with the white youth, who have enjoyed the far greater advantages of our own system of education. Higher education is even more essential to them than it is for white children.

Tenth. Special pains should be taken to bring together in the large boarding-schools members of as many different tribes as possible, in order to destroy the tribal antagonism and to generate in them a feeling of common brotherhood and mutual respect. Wherever practicable, they should be admitted on terms of equality into the public schools, where, by daily contact with white children, they may learn to respect them and become respected in turn. Indeed, it is reasonable to expect that at no distant day, when the Indians shall have all taken up their lands in severalty and have become American citizens, there will cease to be any necessity for Indian schools maintained by the Government. The Indians, where it is impracticable for them to unite with their white neighbors, will maintain their own schools.

Eleventh. Co-education of the sexes is the surest and perhaps only way in which the Indian women can be lifted out of that position of servility and degradation which most of them now occupy, on to a plane where their husbands and the men generally will treat them with the same gallantry and respect which is accorded to their more favored white sisters.

Twelfth. The happy results already achieved at Carlisle, Hampton, and elsewhere, by the so-called "outing system," which consists in placing Indian pupils in white families where they are taught the ordinary routine of housekeeping, farming, etc., and are brought into intimate relationship with the highest type of American rural life, suggests the wisdom of a large extension of the system. By this means they acquire habits of industry, a practical acquaintance with civilized life, a sense of independence, enthusiasm for home, and the practical ability to earn their own living. This system has in it the "promise and the potency" of their complete emancipation.

Thirteenth. Of course, it is to be understood that, in addition to all of the work here outlined as belonging to the Government for the education and civilization of the Indians, there will be requisite the influence of the home, the Sabbath-school, the church, and religious institutions of learning. There will be urgent need of consecrated missionary work and liberal expenditure of money on the part of individuals and religious organizations in behalf of these people. Christian schools and colleges have already been established for them by missionary zeal, and others will doubtless follow. But just as the work of the public schools is supplemented in the States by Christian agencies, so will the work of Indian education by the Government be supplemented by the same agencies. There need be no conflict and no unseemly rivalry. The Indians, like any other class of citizens, will be free to patronize those schools which they believe to be best adapted to their purpose.

HIGH SCHOOLS.

There are at present three general classes or kinds of Government schools—the so-called industrial training school, the reservation boarding-school, and the camp or day school. There is for these schools no established course of study, no order of exercises. The teachers do as the Israelites did in the days of the judges—"each one that which seems right in his own eyes." The schools sustain no necessary relation to each other. There is no system of promotion or of transfer from one school to another. One of the most obvious needs of the hour is to mark out clearly the work of the schools and to bring the different grades into organic relationship.

Assuming that the Government should furnish to the Indian children, who look directly to it for preparation for citizenship, an education equivalent to that provided by the several States for the children under their care, the problem is greatly simplified. The high school is now almost universally recognized as an essential part of the common-school system. There are in operation in the United States about 1,200 of them, with an enrollment of 120,000. These "people's colleges" are found everywhere, in cities, towns, villages, and country places from Maine to Oregon. Colorado and other new States rival Massachusetts and other New England communities in the munificence of their provision for high-school education of their youth. A high-school education at public expense is now offered to the great mass of youth of every race and condition except the Indian. The foreigner has the same privilege as those "native and to the manor born." The poor man's child has an equal chance with the children of the rich. Even the negroes of the South have free entrance to these beneficent institutions. The Government, for its own protection and for the sake of its own honor, should offer to the Indian boys and girls a fair opportunity to equip themselves as well for citizenship and the struggle for life that citizenship brings, as the average boys and girls of the other races with whom they must compete.

What then should an Indian high school be? The answer is at hand. An Indian high school should be substantially what any other high school should be. It should aim to do four things:

First. The chief thing in all education is the development of character, the formation of manhood and womanhood. To this end the whole course of training should be fairly saturated with moral ideas, fear of God, and respect for the rights of others; love of truth and fidelity to duty; personal purity, philanthropy, and patriotism. Self-respect and independence are cardinal virtues, and are indispensable for the enjoyment of the privileges of freedom and the discharge of the duties of American citizenship. The Indian high schools should be schools for the calling into exercise of those noble traits of character which are common to humanity and are shared by the red children of the forest and plain as well as by the children of the white man.

Second. Another great aim of the high school is to put the student into right relations with the age in which he lives. Every intelligent human being needs to have command of his own powers, to be able to observe, read, think, act. He has use for an acquaintance with the elements of natural science, history, literature, mathematics, civics, and a fair mastery of his own language, such as comes from rhetoric, logic, and prolonged practice in English composition.

The Indian needs, especially, that liberalizing influence of the high school which breaks the shackles of his tribal provincialism, brings him into sympathetic relationship with all that is good in society and

in history, and awakens aspirations after a full participation in the best fruits of modern civilization.

The high school should lift the Indian students on to so high a plane of thought and aspiration as to render the life of the camp intolerable to them. If they return to the reservations, it should be to carve out for themselves a home, and to lead their friends and neighbors to a better mode of living. Their training should be so thorough, and their characters so formed, that they will not be dragged down by the heathenish life of the camp. The Indian high school rightly conducted will be a gateway out from the desolation of the reservation into assimilation with our national life. It should awaken the aspiration for a home among civilized people, and offer such an equipment as will make the desire prophetic of fulfillment.

Third. The high school, which standing at the apex of the common-school system and offering all that the mass of youth of any class can receive, offers to the few ambitious and aspiring a preparation for university culture. The high school, even in some of the newer States, prepares for college those who have special aptitudes and lofty ambition.

Several Indian boys have already pursued a college course and others are in course of preparation. There is an urgent need among them for a class of leaders of thought, lawyers, physicians, preachers, teachers, editors, statesmen, and men of letters. Very few Indian boys and girls, perhaps, will desire a college education, but those few will be of immense advantage to their fellows. There is in the Indian the same diversity of endowment and the same high order of talent that the other races possess, and it waits only the touch of culture and the favoring opportunity for exercise to manifest itself. Properly educated, the Indians will constitute a valuable and worthy element in our cosmopolitan nationality. The Indian high school should offer an opportunity for the few to rise to any station for which nature has endowed them, and should remove the reproach of injustice in withholding from the Indian what is so freely offered to all others.

Fourth. Owing to the peculiar surroundings of the mass of Indian children, they are homeless and are ignorant of those simplest arts that make home possible. Accordingly the Indian high school must be a boarding and industrial school, where the students can be trained in the homely duties and become inured to that toil which is the basis of health, happiness, and prosperity. It should give especial prominence, as is now done in the best industrial schools for white youth, to instruction in the structure, care, and use of machinery. Without machinery the Indians will be hopeless and helpless in the industrial competition of modern life.

The pupils should also be initiated into the laws of the great natural forces, heat, electricity, etc., in their application to the arts and appliances of civilized life.

The course of study should extend over a period of five years, in order that there may be time for the industrial work, and opportunity for a review of the common branches, arithmetic, grammar, and geography. Special stress should be laid upon thoroughness of work, so that the students may not be at a disadvantage when thrown into competition with students of like grade in similar schools for other children.

The plant for each institution should include necessary buildings for dormitories, school-rooms, laboratories, shops, hospital, gymnasium, etc., with needed apparatus and library, and an ample quantity of good farming land, with the necessary buildings, stock, and machinery.

The schools should be located in the midst of a farming community, remote from reservations, and in the vicinity of railroads and some thriving village or city. The students would thus be free from the great downpull of the camp, and be able to mingle with the civilized people that surround them, and to participate in their civilization.

The teachers should be selected with special reference to their adaptation to the work, should receive a compensation equivalent to that paid for like service in white schools of same grade, and should have a stable tenure of office.

The number of these schools that will be ultimately required can not be determined accurately without more experience. The number of pupils who can be profitably educated in high schools is not large, but is growing larger year by year. It may be best for the present to develop a high-school department in say three schools. Those at Carlisle, Pa., Lawrence, Kans., and Chemawa (near Salem), Oregon, can readily do so. Indeed, high-school classes have already been formed and are now at work. In the future the schools at Genoa, Nebr., and Grand Junction, Colo., can be added to the others, making a group of five high schools, admirably located to supply the needs of the great body of Indians. Their graduates will supply a body of trained men and women competent for leadership.

The cost of maintaining these schools will depend upon the number of pupils provided for. One hundred and seventy-five dollars per capita, the sum now paid at several places, will probably be ample. For the year ending June 30, 1889, the sum of \$80,000 was appropriated for Carlisle, and \$85,000 for Haskell Institute. It would be easy to carry into successful operation the plan here outlined by an annual outlay of \$100,000 for each school, which is a very small advance over the present appropriation.

GRAMMAR SCHOOLS.

As the large mass of Indian youth who are to be educated will never get beyond the grammar grade, special pains should be taken to make these schools as efficient as possible. The studies should be such as are ordinarily pursued in similar white schools, with such modifications as experience may suggest.

Among the points that may properly receive special attention are the following:

(1) The schools should be organized and conducted in such a way as to accustom the pupils to systematic habits. The periods of rising and retiring, the hours for meals, times for study, recitation, work and play should all be fixed and adhered to with great punctiliousness. The irregularities of camp life, which is the type of all tribal life, should give way to the methodical regularity of daily routine.

(2) The routine of the school should tend to develop habits of self-directed toil, either with brain or hand, in profitable labor or useful study. The pupils must be taught the marvelous secret of diligence. The consciousness of power springing from the experience of "bringing things to pass" by their own efforts is often the beginning of a new career of earnest endeavor and worthy attainment. When the Indian children shall have acquired a taste for study and a love for work the day of their redemption will be at hand.

During the grammar period of say five years, from ten to fifteen, much can be accomplished in giving to the girls a fair knowledge of and practical experience in all common household duties, such as cooking, sewing, laundry work, etc., and the boys may acquire an acquaintance with

farming, gardening, care of stock, etc. Much can be done to familiarize them with the use of tools, and they can learn something of the practical work of trades, such as tailoring, shoe-making, etc. Labor should cease to be repulsive, and come to be regarded as honorable and attractive. The homely virtue of economy should be emphasized. Pupils should be taught to make the most of everything, and to save whatever can be of use. Waste is wicked. The farm should be made to yield all that it is capable of producing, and the children should be instructed and employed in the care of poultry, bees, etc., and in utilizing to the utmost whatever is supplied by the benevolence of the Government or furnished by the bounties of nature.

(3) All the appointments and employments of the school should be such as to render the children familiar with the forms and usages of civilized life. Personal cleanliness, care of health, politeness, and a spirit of mutual helpfulness should be inculcated. School-rooms should be supplied with pictures of civilized life, so that all their associations will be agreeable and attractive. The games and sports should be such as white children engage in, and the pupils should be rendered familiar with the songs and music that make our home life so dear. It is during this period particularly that it will be possible to inculcate in the minds of pupils of both sexes that mutual respect that lies at the base of a happy home life, and of social purity. Much can be done to fix the current of their thoughts in right channels by having them memorize choice maxims and literary gems, in which inspiring thoughts and noble sentiments are embodied.

(4) It is of prime importance that a fervent patriotism should be awakened in their minds. The stars and stripes should be a familiar object in every Indian school, national hymns should be sung, and patriotic selections be read and recited. They should be taught to look upon America as their home and upon the United States Government as their friend and benefactor. They should be made familiar with the lives of great and good men and women in American history, and be taught to feel a pride in all their great achievements. They should hear little or nothing of the "wrongs of the Indians," and of the injustice of the white race. If their unhappy history is alluded to it should be to contrast it with the better future that is within their grasp. The new era that has come to the red men through the munificent scheme of education, devised for and offered to them, should be the means of awakening loyalty to the Government, gratitude to the nation, and hopefulness for themselves.

Everything should be done to arouse the feeling that they are Americans having common rights and privileges with their fellows. It is more profitable to instruct them as to their duties and obligations, than as to their wrongs. One of the prime elements in their education should be a knowledge of the Constitution and Government under which they live. The meaning of elections, the significance of the ballot, the rule of the majority, trial by jury—all should be explained to them in a familiar way.

(5) A simple system of wage-earning, accompanied by a plan of savings, with debit and credit scrupulously kept, will go far towards teaching the true value of money, and the formation of habits of thrift, which are the beginnings of prosperity and wealth. Every pupil should know something of the ordinary forms of business, and be familiar with all the common standards of weights and measures.

(6) No pains should be spared to teach them that their future must depend chiefly upon their own exertions, character, and endeavors. They will be entitled to what they earn. In the sweat of their faces must they eat bread. They must stand or fall as men and women, not

as Indians. Society will recognize in them whatever is good and true, and they have no right to ask for more. If they persist in remaining savages the world will treat them as such, and justly so. Their only hope of good treatment is in deserving it. They must win their way in life just as other people do, by hard work, virtuous conduct, and thrift. Nothing can save them from the necessity of toil, and they should be inured to it as at the same time a stern condition of success in life's struggle, and as one of life's privileges that brings with it its own reward.

(7) All this will be of little worth without a higher order of moral training. The whole atmosphere of the school should be of the highest character. Precept and example should combine to mold their characters into right conformity to the highest attainable standards. The school itself should be an illustration of the superiority of the Christian civilization.

The plant required for a grammar school should include suitable dormitories, school buildings, and shops, and a farm with all needed appointments.

The cost of maintaining it will be approximately \$175 per capita per annum.

The final number and location of these schools can be ascertained only after a more thorough inspection of the whole field. At present the schools at Chilocco, in the Indian Territory; Albuquerque, N. Mex.; Grand Junction, Colo.; and Genoa, Nebr., might be organized as grammar schools. The completion of the buildings now in course of erection at Pierre, S. Dak.; Carson, Nev.; and Santa Fé, N. Mex.; will add three more to the list. It will doubtless be possible at no distant day to organize grammar school departments in not less than twenty-five schools.

PRIMARY SCHOOLS.

The foundation work of Indian education must be in the primary schools. They must to a large degree supply, so far as practicable, the lack of home training. Among the special points to be considered in connection with them, are:

(1) Children should be taken at as early an age as possible, before camp life has made an indelible stamp upon them. The earlier they can be brought under the beneficent influences of a home school, the more certain will the current of their young lives set in the right direction.

(2) This will necessitate locating these schools not too far away from the parents, so that they can occasionally visit their little children, and more frequently hear from them and know of their welfare and happiness.

(3) The instruction should be largely oral and objective, and in the highest degree simplified. Those who teach should be from among those who have paid special attention to kindergarten culture and primary methods of instruction. Music should have prominence, and the most tireless attention should be given to training in manners and morals. No pains should be spared to insure accuracy and fluency in the use of idiomatic English.

(4) The care of the children should correspond more to that given in a "Children's Home" than to that of an ordinary school. The games and employments must be adapted to the needs of little children.

The final number and location of these schools can not yet be fixed. Probably fifty will meet the demands of the near future. Many of the reservation boarding schools now in operation can be converted into primary schools.

DAY SCHOOLS.*

The circle of Government schools will be completed by the establishment of a sufficient number of day schools to accommodate all whom it is not practicable to educate in boarding schools.

It is believed that by providing a home for a white family, in connection with the day school, each such school would become an impressive object lesson to the Indians of the white man's mode of living. The man might give instruction in farming, gardening, etc., the woman in cooking, and other domestic matters, while a regular teacher could perform the usual school-room duties.

Pupils from these schools could be promoted and transferred to the higher institutions.

These day schools and reservation boarding schools are an absolutely necessary condition of the successful work which is to be done in the grammar and high schools not on reservations. They will help to educate the older Indians and will tend so to alter the environment and to improve the public sentiment that when pupils return from boarding schools, as many will and must, they will find sympathy and support in their civilized aspirations and efforts.

The scheme thus outlined of high, grammar, primary, and day school work is necessarily subject to such modifications and adaptations as the varying circumstances of the Indian school service demand. The main point insisted upon is the need of formulating a system and of putting it at once into operation, so that every officer and employé may have before him an ideal of endeavor, and so that there may be the most economical use of the means devoted to Indian education.

A beginning has already been made, and a few years of intelligent work will reduce to successful practice what now is presented in theory.

TEACHERS.

Teaching in Indian schools is particularly arduous. In all boarding schools the employés are necessarily on duty for a much greater length of time for each day, and for more days, than is required of teachers in the common schools of the country. The training of Indian pupils devolves

* Since these paragraphs on day schools were written, I have been gratified to learn that the plan thus outlined substantially agrees with that set forth by the late Superintendent of Indian Schools, J. M. Haworth, in his annual report, dated September 25, 1883, from which the following is an extract:

"The semi-boarding and industrial school referred to was recommended in my report of October last, and is repeated here with renewed recommendations for its adoption at some of the agencies where best adapted. It should consist of a four-room building, providing for home comforts for a man and wife and a teacher, also a school room accommodating 50 children. A midday meal should be provided for the school by regular details of girls, under the direction of the matron, who should also visit the homes of the Indians living in that neighborhood, and instruct the women in household duties. The man should have charge of the outside work, including farming and the care of stock, in which he should instruct the boys of the school; he should also give instruction to the Indians of the neighborhood in the same branches; the teacher to have charge of the children during school hours.

"It is estimated that the cost of the building, utilizing such Indian help as can be done to advantage, will not average over \$2,000, and the cost of conducting the school, including the pay of three persons and necessary provision for a midday meal, will not exceed \$3,500. Of course this provision at agencies where rations are issued can be taken from the regular supplies without much additional cost. This plan it is believed will take the place of additional boarding-schools at agencies where the present facilities are much too small to accommodate the school population. Twenty new buildings of this character are recommended for construction, to be divided among the Sioux, Navajo, Kiowa and Comanche, Cheyenne and Arapaho, Mexican Kickapoo, Uto and Crow Indians."

almost wholly upon the teachers, whose work is not supplemented and reinforced by the family, the church, and society. The difficulty of teaching pupils whose native language is so strange as that spoken by the major portion of Indian pupils adds largely to the work.

In reservation schools the teacher is far removed from the comforts of home and the pleasures of society, and is largely deprived of association with congenial companions. The furnishings of the teachers' quarters and the school buildings are primitive, and the table frugal, unless it is made expensive. The schools are often located at a great distance from the teacher's home, involving a long and expensive journey. The surroundings are not restful.

To compensate for these disadvantages, the Government, in order to command good talent, ought to offer a fair compensation, never less than that paid by the surrounding communities for similar service, and should afford opportunity for promotion, and offer a reasonably fixed tenure of office.

The positions should be opened to all applicants on equal terms, and should be awarded on the basis of merit. Special stress should be laid upon :

(1) Good health. The privations of the lonely life and the peculiar difficulties of the work will necessarily make a heavy draft upon the teacher's vital energies.

(2) None but those of the most excellent moral character and of good repute should be sent as teachers to those who will be more influenced by the example of their teachers than by their instruction.

(3) Faith in the Indian's capacity for education and an enthusiasm for his improvement are needful for the highest success in teaching.

(4) An acquaintance with the best modern methods of instruction and familiarity with the practical workings of the best public schools, will be of immense advantage in a work beset with so many difficulties.

(5) A mastery of idiomatic English is particularly essential to those who have the difficult task of breaking up the use of Indian dialects and the substitution therefor of the English language.

(6) Teachers should be selected for special grades of work. Some are specially fitted to excel in primary work, while others are better adapted to the work of higher grades.

(7) A quality greatly to be desired is the power of adapting oneself to new and trying surroundings, and of bearing with fortitude the hardships and discouragements incident to the service.

SCHOOL SUPERVISION.

There is at present one Superintendent of Indian Schools, charged with the duty of visiting them and reporting on their condition. A glance at any map of the United States showing the location of the Indians, reveals at once the physical impossibility of any adequate supervision by one man.

The Superintendent should have at least five principal assistants, school experts, who, under his direction, shall give their entire time to the supervision of schools in their respective fields.

Some such plan as that herein set forth seems absolutely necessary for the preparation of the rising generation of Indian youth for absorption into our national life. Enough has been already accomplished to show that the scheme is entirely feasible. The Government has ample means at its disposal. The treaty and trust funds held for the Indians would meet no inconsiderable part of the necessary outlay.

The same care devoted to the training of young Indians for citizenship now bestowed upon educating officers for the Army and Navy would accomplish results equally striking.

The same liberality and care on the part of the Government for the proper education of its wards that is shown by the several States in maintaining a system of public schools would be followed by like results.

Nothing less than this is worthy of this great nation of 60,000,000 people. Such a plan successfully inaugurated would mark the beginning of a century of honor.

COST OF CARRYING OUT A SYSTEM OF INDIAN EDUCATION.

In attempting to carry into execution the plan already outlined for the education of all accessible Indian youth of school age, it is desirable to know, approximately at least, what the annual and the ultimate cost will be. Accordingly, in a series of tables herewith submitted, the attempt has been made to reach as nearly accurate a conclusion on this matter as the present condition of Indian school statistics will admit.

As is well known, there has never been an absolutely reliable census of the Indians made, or even attempted; but it is thought that the figures given in Table 1 are sufficiently accurate to form at least a basis of calculations.

TABLE 1.—*Population and school population, 1888-'89.*

Total Indian population.....	250,430
Five civilized tribes.....	65,200
New York Indians.....	5,046
	<hr/> 70,246
Remainder under care of Government.....	180,184
School population (six to sixteen), 20 per cent. of population.....	36,000
Possible enrollment (estimated), 75 per cent. of school population..	27,000
Average attendance, 80 per cent. of enrollment.....	21,600
Needed capacity, 90 per cent. of enrollment.....	24,300

The school period assumed (six to sixteen years) is taken simply as a standard of comparison. In some cases it will be desirable, where school facilities can be provided, to receive Indian children into home or kindergarten schools much earlier than six years of age; and doubtless for some years to come it will also be desirable to have Indian youth who are strong in body and susceptible of culture continue in school beyond the age of sixteen years. How much the number of Indian school pupils will be modified by these considerations is simply a matter of conjecture.

Twenty per cent. has been assumed as the relative proportion of Indian youth from six to sixteen years of age, as compared with the total population. This percentage may not be exact. The proportion of youth from six to sixteen years of age to the total population of the United States is $23\frac{1}{2}$ per cent., according to the United States Commissioner of Education, Hon. W. T. Harris. Whether this would be a more accurate standard of comparison for the Indians can not now be determined.

The percentages of enrollment and average attendance are based, so far as knowledge of the past experience in Indian education will warrant, upon records in the Indian Office. They are necessarily somewhat elastic. But it is safe to assume that it is reasonable for the Government to at least attempt to secure the enrollment and average indicated in Table 1. Certainly nothing less than this should be at-

tempted, and if future experience will warrant it, it will be a very simple matter to extend the estimates to make them commensurate with the increased attendance which may be secured.

TABLE 2.—*Present school accommodations.*

	Pupils.
Government boarding-schools	7,145
Government day schools.....	3,083
New boarding-schools (1890).....	445
Total.....	10,673

Table 2, which exhibits the present accommodations provided in Government schools, shows that provision has been made for over 10,000 pupils. Regarding this it should be said that in many cases, if the attendance at the school should equal the capacity given, the pupils would be very uncomfortable and in some cases their health would be endangered. Most of the Government school buildings now in existence, in order to accommodate properly the number of pupils indicated as the capacity of the buildings, would need extensive repairs and added facilities in the way of shops, hospitals, dormitories, bath-rooms, laundries, etc.

By an arbitrary assumption it is proposed to provide for 17,000 pupils in Government boarding-school buildings, and for 7,300 pupils in Government day-school buildings. How far this proportion may prove to be practicable and desirable can be determined only by experience; but from present knowledge it is thought to be entirely safe to assume that proportion as the basis of calculation.

In estimating the cost of the needed boarding accommodations the cost of the buildings provided for Haskell Institute at Lawrence, Kans., has been taken as a standard.

Owing to the very great difficulties by which the work of extending school facilities is hedged about, it is at present regarded as inexpedient to attempt to make provision during the next fiscal year for the accommodation of more than one-fourth of the Indian youth now unprovided for in Government school buildings. If it shall be found practicable to advance the work more rapidly than that, a larger effort may be put forth the second year.

TABLE 3.—*Estimated cost of school accommodations.*

Pupils for whom boarding accommodations are needed.....	17,000
Pupils for whom boarding accommodations are provided by the Government	7,590
Pupils for whom boarding accommodations should be provided....	9,410
Pupils for whom boarding accommodations should be provided in one year (one-fourth the pupils unprovided for)	2,352
Pupils for whom day accommodations are needed.....	7,300
Pupils for whom day accommodations are provided by the Government	3,083
Pupils for whom day accommodations should be provided by the Government	4,217
Pupils for whom day accommodations should be provided by the Government in one year (one-fourth the pupils unprovided for) ..	1,054
New buildings, and additions to old buildings, and furnishings for 2,352 boarders, at \$230 per capita.....	\$540,960
New buildings and additions to old buildings, and furnishings for 1,054 day pupils, at \$1,500 for every 30 pupils (including teachers' residence)	52,500
Repairs and improvements of present buildings (estimated).....	50,000
Total for buildings.....	643,460

According to Table 3, the Government should expend next year a sum of not less than \$643,000 in adding to the accommodations of Government school buildings. This is a very small sum to be expended by the United States Government for such a purpose. It is only a little more than double the amount paid by the citizens of Omaha for their high-school building, and scarcely more than enough to build two such grammar schools as are the boast of the city of Providence, R. I., and about one-half the sum that was spent in building the Providence City Hall. It is estimated that the Government building at San Francisco, will cost not less than \$1,000,000, and with that understanding Congress has already appropriated \$800,000 to purchase the site upon which the building will be placed. The Government building at Omaha will cost, with its site, \$1,200,000, and the building and site at Milwaukee will cost the same amount. For coast-defense guns of one kind there was appropriated for the fiscal year ending June 30, 1889, \$1,500,000.

Congress last year appropriated for new school buildings, furniture and sites in the District of Columbia, \$311,792; and the year preceding \$315,000 was voted for new buildings.

TABLE 4.—*Estimated cost of support of pupils, 1890-'91.*

GOVERNMENT SCHOOLS.	
Boarding-schools:	
Average attendance to be secured	15,000
Present average attendance	5,212
Difference	9,788
Increased average to be supported next year (one-fourth above difference)	2,447
Total average which should be supported next year	7,659
Day schools:	
Average attendance to be secured	6,600
Present average attendance	1,744
Difference	4,856
Increased average to be supported next year (one-fourth above difference)	1,214
Total average which should be supported next year	2,958
Support of 7,659 boarders, at \$175 per capita	\$1,340,325
Support of 2,958 day pupils, at \$62.50 per capita	184,875
	1,525,200
CONTRACT SCHOOLS.*	
Allowances for 1889-'90 (4,622 boarding pupils, 895 day pupils)...	561,950
Total	\$2,087,150

In estimating the cost of supporting the schools for the next fiscal year, \$175, the largest sum now paid per capita in Government training schools, is assumed as the standard, and it is thought that this is a fair estimate of the average cost. The cost per capita for such day schools as are now contemplated is more a matter of conjecture; but it is thought that the sums assumed will be found not far out of the way. This gives a total for the cost of maintaining schools for the education of 16,134 pupils during the next year as little more than \$2,000,000.

* This includes all schools not under control of the Indian Bureau which receive Government aid.

TABLE 5.—*Appropriations required for next year (1890-'91).*

GOVERNMENT SCHOOLS.	
Erecting and furnishing boarding-school buildings.....	\$540,960
Erecting and furnishing day-school buildings.....	52,500
Repairs and improvements on present buildings.....	50,000
Additional furniture, apparatus, stock, tools, and implements...	50,000
Supporting 7,659 boarding scholars.....	1,340,325
Supporting 2,958 day scholars.....	184,875
Transportation of pupils.....	40,000
Superintendence.....	25,000
	<hr/> 2,283,660
CONTRACT SCHOOLS.	
Allowances for 1889-'90 (4,622 boarding pupils, 895 day pupils)...	561,950
To house and support in Government schools next year, pupils now attending those schools plus one-fourth of the youth not now provided for in Government schools (plus allowance for contract schools, 1889-'90) would cost.....	2,845,610
Appropriations for Indian schools for fiscal year 1889-'90.....	1,364,568
	<hr/>
Increased appropriation required for support of schools, 1890-'91.	1,481,042

The total appropriations required for the year 1890-'91, as shown by Table 5, is estimated as \$2,845,610.

When comparing the cost of educating Indians by the Government with the cost of common-school education as carried on by the States, it should be borne in mind that from the nature of the case the Government plan includes the very considerable items of board, clothing, transportation, and industrial training. The school expenses proper, exclusive of board, clothing, transportation, and industrial work, will probably not exceed the average cost of like work in the public schools. To offset the cost it should be remembered that the Government already provides for clothing and rations for a large number of Indians, and that it costs no more to clothe and feed the young in school than in camp, except that they are better fed and clothed in school than in camp.

It should also be remembered that the Government is under positive treaty obligations with a large body of Indians to furnish them suitable education. It is still further significant that the Indians are now showing a disposition to take their lands in severalty, to dispose of the surplus lands for a fair consideration, and to invest a very considerable portion of the proceeds of the sales thereof in education; so that a very large proportion of the cost of Indian education administered by the Government will be borne willingly and cheerfully by the Indians themselves and not by the people of the United States. But even if the people of the United States were to assume the whole burden of Indian education, it would be a burden very easily borne, and would be but a slight compensation to be returned by this vast and rich nation to the original possessors of the soil upon whose lands the nation with its untold wealth now lives.

TABLE 6.—*Amount required to put and support all Indian children in Government schools next year.*

New buildings and furnishings for 9,410 boarders, at \$230 per capita.....	\$2,164,300
New buildings and furnishings for 4,217 day pupils, at \$1,500 for every 30 pupils.....	210,000
Repair and improvement of present buildings.....	50,000
Additional furniture, apparatus, stock, tools, and implements...	50,000
	<hr/> 2,474,300

TABLE 6.—Amount required to put and support all Indian children in Government schools each year—Continued.

Support of an average of 15,000 boarding pupils, at \$175	\$2, 625, 000
Support of an average of 6,600 day pupils, at 62.50...	412, 500
Transportation of pupils.....	40, 000
Superintendence	25, 000
	<hr/> \$3, 102, 500
Total.....	5, 576, 800

By an inspection of Table 6, the grand aggregate of expenditures which it is thought would be necessary to provide ample accommodations in Government buildings for all Indian youth of school age is \$2,474,300.

Compare this sum with the cost of constructing ordinary war ships. By special act of Congress, approved September 7, 1888, the President was authorized to have constructed by contract two steel cruisers of about 3,000 tons displacement each, at a cost (exclusive of armament and excluding any premiums that may be paid for increased speed), of not more than \$1,100,000 each; one steel cruiser of about 5,300 tons displacement, to cost \$1,800,000; one armored cruiser, of about 7,500 tons displacement, to cost, exclusive of armament and premiums, \$3,500,000; three gun-boats or cruisers, of not to exceed 2,000 tons displacement, each to cost not more than \$700,000. The appropriation for construction and steam-machinery for these vessels was \$3,500,000 additional. The armament involves \$2,000,000 more, making, in all, over \$15,000,000 for six naval vessels.

The *Dolphin*, one of the smallest of the fleet, consumes annually \$35,000 worth of coal—a sum which would clothe, feed, and train in useful industries during that period 200 Indian youth.

By further reference to Table 6, it will be seen that the estimated amount which will be required annually for the maintenance of a Government system of education for all Indians will amount to \$3,102,500. Of course, in addition to this, an expenditure will have to be made each year to repair and otherwise keep in good order the various school buildings and furnishings.

In this connection, it is well to note that the sum paid for education by the city of Boston amounts to \$1,700,000; by the State of New York more than \$16,000,000 annually; while the cost of the maintenance of the public-school system of the States and Territories of this country as a whole, according to the report of the Commissioner of Education, is more than \$115,000,000. The United States pays for the maintenance of a little army of about 25,000 men nearly \$25,000,000 annually; the appropriation for the fiscal year ended June 30, 1889, aggregated \$24,574,700.

In estimating the cost of maintaining an adequate school system for the Indians two great economical facts should steadily be borne in mind. The first is that by this system of public education the Indian will, at no distant day, be prepared not only for self-support, but also to take his place as a productive element in our social economy. The pupils at the Carlisle Indian Training School earned last year by their labors among the Pennsylvania farmers more than \$10,000, and this year more than \$12,000. From facts like these it can easily be demonstrated that, simply as a matter of investment, the nation can afford to pay the amount required for Indian education, with a view of having it speedily returned to the aggregate of national wealth by the increased productive capacity of the youth who are to be educated.

The second great economical fact is that the lands known as Indian

reservations now set apart by the Government for Indian occupancy aggregate nearly 190,000 square miles. This land, for the most part, is uncultivated and unproductive. When the Indians shall have been properly educated they will utilize a sufficient quantity of those lands for their own support and will release the remainder that it may be restored to the public domain to become the foundation for innumerable happy homes; and thus will be added to the national wealth immense tracts of farming land and vast mineral resources which will repay the nation more than one hundred fold for the amount which it is proposed shall be expended in Indian education.

TABLE 7.—*Annual appropriations made by the Government since 1876 for support of Indian schools.**

Year.	Appropriation.	Per cent. of increase.	Year.	Appropriation.	Per cent. of increase.
1876.....	\$20,000	.....	1884.....	992,800	47
1877.....	30,000	50	1885.....	1,100,065	10
1878.....	60,000	100	1886.....	1,211,415	10
1879.....	75,000	25	1887.....	1,179,916	*02.6
1880.....	75,000	.....	1888.....	1,348,015	14
1881.....	135,000	80	1889.....	1,364,568	01
1882.....	487,200	260	1890 (amount required) ..	2,845,610	110
1883.....	675,200	38			

* Decrease.

From an inspection of Table 7 it will be seen that the Government entered upon the present plan of educating Indians in 1876, by the appropriation of \$20,000 for that purpose; and that for a period of eight years there was an almost steady increase in the appropriations for Indian education, amounting to an average of 75 per cent. per annum. For the next five years the increase was at an average rate of 7 per cent. per annum. Had there been during the latter period an average increase of 20 per cent., the appropriation for 1890 would have exceeded the amount now asked for. What is proposed by the Indian Office now is to carry forward the work in the line of its historical development. The amount asked for for next year can all be used to good advantage without extravagance in enlarging and more fully equipping schools already in successful operation, and in planting others where there is urgent demand for them.

Full reports of each agency of the present condition and needs of the school are being received and carefully tabulated; plans of buildings are being prepared, and sites selected, and everything will be in readiness, as soon as the money asked for is placed at the control of the Indian Office, to move forward at every point intelligently and conservatively.

It will be seen that there is nothing radically new, nothing experimental nor theoretical, and that the present plans of the Indian Office contemplate only the putting into more systematic and organic form, and pressing with more vigor the work in which the Government has been earnestly engaged for the past thirteen years, with a view of carrying forward as rapidly as possible to its final consummation that scheme of public education which during these years has been gradually unfolding itself.

That the time is fully ripe for this advanced movement must be evident to every intelligent observer of the trend of events connected with the condition of the Indians. Practically all the land in this vast region known as the United States, from ocean to ocean again, has now been organized into States or Territories. The Indian populations are

surrounded everywhere by white populations, and are destined inevitably, at no distant day, either to be overpowered or to be assimilated into the national life. The most feasible, and indeed it seems not too strong to say the only, means by which they can be prepared for American citizenship and assimilation into the national life is through the agency of some such scheme of public education as that which has been outlined, and upon which the Government, through the Indian Office, is busily at work. The welfare of the Indians, the peace and prosperity of the white people, and the honor of the nation are all at stake, and ought to constrain every lover of justice, every patriot, and every philanthropist, to join in promoting any worthy plan that will reach the desired end.

This great nation, strong, wealthy, aggressive, can signalize its spirit of fairness, justice, and philanthropy in no better way, perhaps, than by making ample provision for the complete education and absorption into the national life of those who for more than one hundred years have been among us but not of us. Where in human history has there been a brighter example of the humane and just spirit which ought to characterize the actions of a Christian nation superior in numbers, intelligence, riches, and power, in dealing with those whom it might easily crush, but whom it is far nobler to adopt as a part of its great family?

REPORT OF THE SUPERINTENDENT OF INDIAN SCHOOLS.

DEPARTMENT OF THE INTERIOR,
INDIAN SCHOOL SERVICE,
OFFICE OF SUPERINTENDENT,
Washington, D. C., September 5, 1889.

SIR: I have the honor to submit the following report of the operation and condition of the Indian schools.

On the 1st day of May, 1889, I entered upon the duties of this office, after a vacancy in it of nearly two months since the departure of my predecessor.

In looking back over the records I find the following list of incumbents:

J. H. Haworth, July 1, 1883, to March 12, 1885.

John H. Oberly, May 9, 1885, to April 17, 1886.

John B. Riley, June 4, 1886, to December 29, 1887.

S. H. Albro, October 29, 1888, to March 4, 1889.

In the five years and ten months since Mr. Haworth was first appointed the office has been vacant one year three months and thirteen days.

My predecessor, Mr. Albro, rendered a report upon Indian school affairs dated January 16, 1889. In the time intervening between that date and the date of my incumbency, the usual routine was pursued, of which it is not possible to make a statement, except as it will be found in the annual statistical tables of the schools.

In studying the text of the statute upon which this office is predicated, to ascertain its legal responsibilities and duties, I find that important changes were made in the legislation approved June 29, 1888, by the act approved March 2, 1889. Section 8 of the act of 1888 reads as follows:

SEC. 8. That there shall be appointed by the President, by and with the advice and consent of the Senate, a person of knowledge and experience in the management, training, and practical education of children, to be Superintendent of Indian Schools, who shall, from time to time, and as often as the nature of his duties will permit, visit the schools where Indians are taught, in whole or in part, by appropriations from the United States Treasury, and shall, from time to time, report to the Secre-

tary of the Interior what, in his judgment, are the defects, if any, in any of them in system, in administration, or in means for the most effective advancement of the children in them toward civilization and self-support; and what changes are needed to remedy such defects as may exist; and shall, subject to the approval of the Secretary of the Interior, employ and discharge superintendents, teachers, and any other person connected with the schools wholly supported by the Government, and with like approval make such rules and regulations for the conduct of such schools as in his judgment their good may require. The Secretary of the Interior shall cause to be detailed from the employes of his Department such assistants and shall furnish such facilities as shall be necessary to carry out the foregoing provisions respecting said Indian schools.

Section 10 of the act approved March 2, 1889, reads as follows:

SEC. 10. That there shall be appointed by the President, by and with the advice and consent of the Senate, a person of knowledge and experience in the management, training, and practical education of children, to be Superintendent of Indian Schools, whose duty it shall be to visit and inspect the schools in which Indians are taught in whole or in part from appropriations from the United States Treasury, and report to the Commissioner of Indian Affairs what, in his judgment, are the defects, if any, in any of them, in system, in administration, or in means for the most effective advancement of the pupils therein toward civilization and self-support, and what changes are needed to remedy such defects as may exist, and to perform such other duties in connection with Indian schools as may be prescribed by the Secretary of the Interior; and section eight of the act entitled "An act making appropriations for the current and contingent expenses of the Indian Department and for fulfilling treaty stipulations with various Indian tribes for the year ending June thirtieth, eighteen hundred and eighty-nine and for other purposes," approved June twenty-ninth, eighteen hundred and eighty-eight, is hereby repealed.

By examination, it will be noticed that all of section 8, 1888, exclusive of such parts as are specified in section 10, 1889, was repealed. Analyzing the two sections, it appears: (1) That by the statute of 1888 the Superintendent of Indian Schools was amenable directly and wholly to the Secretary of the Interior, reported to him, was subject wholly to his direction, and exercised his power of appointment, etc., subject to the approval of said Secretary; but according to the statute of 1889 the superintendent is directed to report to the Commissioner of Indian Affairs, while he may, nevertheless, be called "to perform such other duties in connection with Indian schools as may be prescribed by the Secretary of the Interior." (2) That power to "employ and discharge superintendents, teachers, and other persons connected with the schools" and to "make rules and regulations for the conduct of such schools" is taken from the Superintendent of Indian Schools. (3) That the present duties of this officer are—

To visit and inspect the schools in which Indians are taught in whole or in part from the United States Treasury and report to the Commissioner of Indian Affairs what are, in his judgment, the defects, if any, in any of them, in administration, or in means for the most effective advancement of the pupils therein toward civilization and self-support, and what changes are needed to remedy such defects as may exist.

In short, his duty is to visit and inspect Indian schools and report to the Commissioner of Indian Affairs. Beyond this, his work is advisory and suggestive.

In entering upon my duties, I first inquired to what extent the Indian schools had been visited by my predecessors, and ascertained that within the last two or three years very few had been personally inspected, the other duties of the office having engrossed attention. I found it the conviction of the Department that the most urgent task connected with the Indian school service was this work of visitation and that my time and strength could not be better employed, at least for a long period, than in the field, in connection with these institutions. I therefore entered at once upon the work of visitation.

I had purposed, and so declared, to take my wife with me in this work, at my own expense, thinking that it would enable me to get access to

many facts relating to the condition and training of the Indian girls which I could not otherwise obtain. She had had large experience in the work of education and sympathized with the proposed service. When these things became known, incidentally, to the Board of Indian Commissioners, several of them said, very emphatically, "This is a service which we have long desired, and your wife should be appointed by the Government to this work." On the 18th of May the Secretary of the Interior, on his own suggestion and responsibility, notified the Commissioner of Indian Affairs that—

Mrs. Merial A. Dorchester is hereby appointed a special agent in the Indian service during the current fiscal year, and detailed to assist the Superintendent of Indian Schools in his investigations of the management of Indian schools, with special reference to the conduct, habits, condition, treatment, training, etc., of the female pupils.

At the expiration of the fiscal year this appointment was renewed. Her report is submitted herewith.

The way being thus prepared, Mrs. Dorchester and I entered upon the visitation of these schools and continued until they were closed for the summer vacation. I had previously visited the Carlisle School and the Lincoln Institute in Philadelphia.

I visited a number of schools which had had only imperfect inspection. For many of the buildings little had been done since their erection. Some of them were more or less dilapidated and some were never fully equipped for the service. The financial management of others awakened much concern in the Department. It was, therefore, suggested by the Commissioner of Indian Affairs that in my inspection I should have reference to the financial expenditures, particularly the special "authorities," with the vouchers thereto; the buildings, whether sufficient or insufficient, their condition, the repairs needed, and the sanitary situation; the furniture, its condition and needs; the dormitories, whether crowded or not; the beds and bedding; the school-room appliances, condition and needs; the supplies, how managed, cared for, etc.; the horses and other stock; the vehicles, industrial implements, etc.; the industrial pursuits, with results and suggestions; the employes, their efficiency, character, number, kind, and compensation. Such was the work which opened before me. During the two months we were in the field, we traveled nearly 6,000 miles and visited twenty schools, the results of which are here given, with the exception of numerous special reports of a business character, with recommendations, estimates for needs, and requests for "authorities" to purchase, which were sent from time to time to the Commissioner of Indian Affairs. In some schools these things constituted a considerable part of my work.

For the statistics of the Indian schools the reader is referred to the report of the Commissioner of Indian Affairs.

CARLISLE SCHOOL.

My arrival at this institution on the morning of May 2 was a surprise to Captain Pratt, the superintendent. I was cordially received, and every effort desirable was put forth to facilitate my investigations.

The business methods of the office were explained, the books were opened and examined, plans of purchase, farm products, and other business phases were considered in as much detail as the time allotted for visitation would allow.

The work of the school is divided into literary and industrial studies, the former occupying the forenoon and the latter the afternoon, all the pupils participating in both.

The school-rooms were visited, the work of the pupils on the black-board, the slates, and in the copy-books was inspected, and questions were freely propounded to teachers and pupils, with gratifying results. These youth particularly excel in penmanship. Geography is also a favorite study, of which they evince commendable knowledge. Arithmetic is more difficult, but some of the classes show good acquaintance with common and decimal fractions and percentage. Of the English language, in its grammatical forms, they obtain considerable knowledge. They spell very well and their reading exercises were good. As in all other schools, there are some very dull pupils, but the brighter ones are relatively as many as in the public schools of the States. The progress of the students far exceeded my expectations.

The order and general *morale* of the school-rooms were most excellent, better than I have observed in many public schools. In this I was agreeably disappointed.

The school is very fortunate in its list of teachers, among whom is an Apache young woman of about twenty years. I saw no reason for special criticism upon any teacher, but much to commend, especially their intelligence, tact, excellent discipline and the kind, cheerful spirit in which their work is conducted. The first efforts with new pupils from the wilderness require great patience, in which these teachers evidently excel.

Nor did the industrial department impress me less favorably. In this most important necessity to the civilization of the Indian, the progress of these pupils is remarkable. The tailoring, harness-making, carriage-making, farming, printing, etc., by the boys, and the making of garments, mending, cooking, laundry work, etc., by the girls, showed that they are rapidly acquiring knowledge and facility in these useful industries.

Captain Pratt showed me the large farm of several hundred acres of excellent land, the buildings, stock, etc. Large crops are annually raised. A splendid herd of cows deserves special mention, and also superior specimens of swine. The barns are unsuitable and poor. New ones should soon take their places; and, with increased facilities and attention, those beautiful and fertile acres can be made to contribute very much more than they now do to sustain the growing number of pupils yearly gathering in this institution. Over all these departments Captain Pratt presides with rare executive ability, evincing broad and well-matured views in reference to his position, and wholly devoted, so far as I could ascertain, to his work.

The dormitories, kitchen, laundry, hospital, bath-rooms, and water-closets I found ample in size, clean, wholesome, and well ventilated; and the two reading-rooms, one for each sex, contained a good variety of newspapers and magazines. The libraries should receive an addition of suitable volumes.

The pupils were viewed at their meals, and, in my mind, they were compared with boys and girls at many boarding-schools and church societies among our white population, to the disadvantage of the latter in respect to order, quiet, and general demeanor.

Nor is the discipline of the school austere or severe, except in a few rare cases. The atmosphere of kindness and intelligent consideration prevails, and all seem sweetly and wisely drawn into good habits, the influence of which can never be wholly lost, even when they return to their wilderness homes.

Nearly three hundred of the pupils, or about one-half of the whole number, were away from the institution, apprenticed for a few months

in excellent places, on farms, in shops, etc., according to a custom which has been followed with the older students for several years. Reports are received from their employers every month, responding to stated inquiries from Captain Pratt, and an agent is sent out to visit and look after them regularly. I examined these reports, which were of the most gratifying character.

An important feature of the work of civilization here carried on is the savings-bank account opened in the office with each pupil. A scheme of wages has been adopted—not large amounts—which is put to the credit of each and from which their incidental expenditures are prudently regulated, so as to teach them economy and self-reliance. About \$5,000 stands to the credit of the boys and about half as much to the girls.

The Indian boys are adepts at the fashionable game of base ball, and have a ground assigned to them. The sight of Indian girls at play, after supper, on the green grass, their agility, happy spirits, kindly ways, etc., deeply impressed me, and I confess to a tinge of sadness as my thoughts ran forward in anticipation of the future before them, when they shall return to the less favorable circumstances of their far-off homes, and wrestle with stern, practical problems. Will these buds brought to Carlisle to bloom be blasted when transplanted to the less congenial reservation soil? Or may the time be not far distant when, under a steadily improving administration of Indian affairs, those far-off wilds shall be filled with the verdure and bloom of a better civilization? Will not the transference of Indian pupils to these schools be one of the means for producing these desired results? There can be no doubt that better conserving influences will be needed on the reservations to strengthen the graduate pupils and hold them from lapsing into the blanket life.

The most scrutinizing inquiries failed to elicit any tendencies to gross immorality. Very seldom have cases of drunkenness occurred among the older boys under the seductions of the neighboring village. Few literary institutions have a better record. The structure of the buildings, the boys and girls having quarters separated by considerable space, the wise administration of their relations and the high bearing of the employés, all combined, are promotive of pure morals and elevated sentiments.

The evening of the day at Carlisle was the occasion of the monthly entertainment in their large hall, consisting of singing, declamations, and dialogues by the Indian pupils.

On the 9th and 10th of May I visited

LINCOLN INSTITUTE, PHILADELPHIA,

William M. Hugg, superintendent. This institution has two departments, one for boys and one for girls, situated about four miles apart. The school for girls is located at 324 South Eleventh street.

It is fitting that in this city, where William Penn made his first acquaintance and treaty with the aborigines, the Government of the United States should now aid the efforts there being made to educate the children of the native Indian.

Shortly after the close of the civil war an institution named for President Lincoln was established here by private individuals for educating the orphan children of soldiers who had fallen in the war. Its remarkable success was due chiefly to the labors of Mrs. J. B. Cox, upon whom devolved the principal burden of the management of that

institution. Credit is also due to other ladies of Philadelphia associated with Mrs. Cox in these volunteer works of benevolence. In due time the civil war ceased to furnish orphans for the Lincoln Institute.

In 1883 the same indefatigable lady undertook to educate and train in the arts of civilized life the sons and daughters of the various tribes of Indians in the United States. Some two hundred Indian boys and girls now occupy the "Homes," under able supervision.

The inmates are trained to speak and write English. The girls do needlework, plain and ornamental, and all kinds of useful domestic work. The boys receive an excellent education, and, placed in positions outside the institution, are trained to work in various branches of industry.

On the occasion of our visit there were in the home children from the Sioux, Chippewa, Ojibway, Santee, Osage, Omaha, Pawnee, Navajo, Cheyenne, Miami, Modoc, Wichita, Mohawk, Oneida, Iroquois, Winnebago, Crow, and Kiowa nations.

The educational department was very interesting. In writing and arithmetic the girls show great readiness and proficiency, and on some cardinal points of chronology and history. In the singing class the girls have been admirably trained, and their performances were pleasing and effective. One young lady, a Mohawk, aged fourteen, may yet prove a veritable Indian *prima donna*. Handel's famous composition, "I know that my Redeemer liveth," was sung with great clearness and delicacy of expression and sweetness and power of intonation.

Other departments of the home—the laundry, the cuisine, the sewing-rooms—presented their evidences of the good work done. One feature ought not to be overlooked: the attention paid to cleanliness and decoration in the gastronomic department. The tables in the dining-room were all tastefully decorated with flowers and fruit, the cutlery and glass being clean and bright. The girls serve by turns in each of the departments, and thus become learned in all matters essential to the comfort and convenience of home. Every girl has some work to do.

In their moral and social capacity, Mrs. Cox says that they are "faithful, affectionate, and grateful," and "the lads are not given to scalping."

The institution is supported, to a considerable extent, by private benevolence, but it is aided by grants from the Government at Washington and the revenues secured from the invested funds of the Lincoln Institute.

During the summer months the school is removed to a beautiful farm in Wayne, Pa.

Of the boys' department, called the Educational Home, located in a delightful part of the city, corner of Forty-ninth street and Greenway avenue, we are not able to speak as favorably, though the outward opportunities are better. This home is in a large, imposing structure, with numerous conveniences and appliances. The building is high, the rooms are airy, the grounds are ample, and cleanliness prevails within and without. A goodly number of teachers are in attendance, but they do not rank as high as those in the girls' school and the proficiency of the boys is much inferior to that of the girls. One of the causes of this inferiority, we infer, is the frequent changes of superintendent and teachers.

The following inquiries and answers will bring out other facts covering these two departments:

Number of pupils from the beginning?—Answer. Girls, one hundred and sixty-nine; boys, one hundred and seventy.

Number of deaths from the beginning ?—Answer. Girls, seven ; boys, three.

Number sent home for bad conduct ?—Answer. Two.

Number returned home at expiration of three years ?—Answer. Fifty-seven.

Number returned home at expiration of five years ?—Answer. Seventeen.

From how many of these pupils have you had definite information since they returned home, how have they conducted themselves, and how many have lapsed ?—Answer. We have definite information from all pupils who have been with us three years or longer. Of some who were with us for a shorter time by reason of ill health, we have no knowledge. In general they are conducting themselves very well, either working at home or for other people. The great difficulty is to find suitable work for them on the reservation. We know of no children who were here for three years or more who have lapsed to savagery.

How many changes of teachers have there been in this institution since Indian pupils were first received ?—Answer. Two in the girls' department. Very frequent changes in the boys' department.

How many pupils during the past year have been put out to service, and in what avocations were they employed ?—Answer. About thirty-five boys were on farms a longer or shorter period. About fifteen girls were placed in the country, at general housework, and gave good satisfaction.

How have they succeeded in learning trades ?—Answer. There are working in the city two boys learning harness-making, one at painting, one at engine-building, one at shoe-making, one at carpentering, three as cash boys, one learning telegraphy and one photography. They succeed as well as the average white boy. There are also thirty boys working at the school—sixteen in the shoe department, four in bakery, four in boiler room, two in laundry and four in the garden. The smaller ones go to school all day.

How many of your pupils have attended public schools ?—Answer. About fifty-five—forty-nine girls and six boys.

How have they succeeded in the public schools ?—Answer. Better than the white pupils. Out of thirteen prizes given at the examination, nine were taken by the Indians, and these nine included the highest prizes.

How much do the expenses of the two schools exceed what is received from Government ?—Answer. Sixty-three hundred and fifty dollars and forty-four cents last year.

How is that excess provided for ?—Answer. By income from investments and by voluntary contributions.

What is the income from the funds held by the directors ?—Answer. Two thousand dollars.

How many more pupils could be accommodated ?—Answer. Fifty.

How many pupils return home this summer ?—Answer. Fifty.

How many will you want to fill your quota ?—Answer. Forty-five.

The proportion of Indian blood in the pupils of this institution is a matter of importance. Of 111 boys and of 99 girls, there were: Full bloods, 53 boys, 39 girls; seven-eighths blood, 1 boy, 2 girls; three-fourths blood, 7 boys, 7 girls; one-half blood, 31 boys, 39 girls; one-fourth blood, 19 boys, 12 girls.

The boys make and repair the boots and shoes and weave some carpeting, besides performing the garden and farm work.

This institution is one of the contract schools of the Government, is under the care of the Episcopalians, and the ritual and catechism of the Protestant Episcopal Church are freely used. The pupils participate in these exercises, and a religious atmosphere pervades the school. The services on Sunday are: Morning prayer, with sermon at 10.30; Sunday-school at 3.30; and evening prayer at 4.30. They have a choral service for evening prayer, which the children like much and sing heartily. Visitors often come to this service and are delighted with the manner in which the children render it. The chaplain says, "In my daily intercourse with the children I am greatly impressed with the strong religious character manifested by some of them and the conscientious discharge of their religious duties."

THE HASKELL INSTITUTE,

at Lawrence, Kans., was visited May 23-29. Unfavorable reports about this institution had reached Washington, and even farther East, and it was deemed necessary to have a close examination of its condition. We found some things urgently calling for changes, and many improvements were even then being made, under the energetic administration of the efficient superintendent, Col. O. E. Learnard, who entered upon this position in January, 1889.

Colonel Learnard, like Governor Robinson, accepted the office of superintendent under heavy protests, because of preoccupation with other business. From the first Colonel Learnard showed the strong hand of an experienced man of business, putting time, heart, and hard work into the affairs of the school. Glaring nuisances were abated; sources of pestilence were purified; inconveniences were remedied; wants were supplied; fences were erected all around the grounds; plank walks were laid to make pleasanter and more decent transit over the soft, slick, sticky, salvy mud; a macadamized road-bed was laid in the inner circle of the large buildings; a new well and force pump were provided; the barn was repaired; milch cows were purchased; jarring employes were controlled, and the whole administration of Colonel Learnard has shown the strong, kind hand of a master. But during all this time he insisted upon resigning his post at the earliest moment when a successor could be appointed. The eight months of Colonel Learnard's administration have been the best period in the annals of the school since its organization under Rev. Dr. Marvin.

This institution is located about 2 miles from the center of Lawrence, a city of over 12,000 inhabitants. It is an educational and industrial school, with 490 acres of excellent land. Four large three and one-half story buildings constitute the center, the last season witnessing the completion of the largest and best of these edifices, at a cost of \$35,000, aside from water, heating, furnishing, etc. Besides the barns, the outbuildings are various industrial shops, bakery, laundry, store, hospital, etc. The stock consists of about forty cows, seventy swine, fourteen horses, and several mules.

At the time of our visit there were in the school 244 boys and 138 girls. The usual routine is school exercises a half day and work the other half day. Six or eight of the large boys are detailed for the farm work in the urgent part of the season; four others have charge of the barns, two each half day; six smaller boys are assigned to the care of the grounds, gathering up waste matter; others crack stones for the road; others clean the dormitories, and others help in the hospital. Sometimes large numbers are called to the farm work, as exigencies re-

quire, and the industrial shops continually absorb a considerable number. Every boy and girl has some industrial work each half day.

Thirty-five acres of corn have been planted this year, 65 of oats, and 8 of potatoes, besides an ample space for vegetables, and 100 acres of hay will be cut. In the first dry season the wet ground should be drained. All the painting of the buildings is performed by the pupils, and a considerable part of the carpenter work also, with the aid of an instructor.

The shops are too small, hence crowded and dirty, so that the best influence is not exerted. There should be more walks, to avoid the discomfort of the proverbial Kansas mud. Even the provision for the accommodation of the swine is reprehensible and wholly inadequate.

We found the hospital a good-sized building, located at a suitable distance to guard against infection. It was undergoing changes and repairs, on account of having been improperly arranged within. Bathing facilities are being introduced, but there is a sad want of comfortable furniture, and some appointments are disgracefully bad, to the great discouragement of the nurses. The stores of drugs are abundant; but such drugs! The more the worse. Fifty ounces of quinine on hand is unfit for use; so of some other articles. I found nine patients in the hospital, some quite sick. Scrofula, with consumptive tendencies, is the prevailing disease. One young man, a consumptive, died and was buried while I was there. Seven or eight pupils every day come to the hospital for treatment. The average number of patients during the past twelve months has been ten. Ten have died during the year—six from pneumonia, two of consumption, and two of malarial fever. In April, 1888, there were seventeen cases of pneumonia. Dr. Bunn, the physician, is a superior man and very successful.

The food in the hospital is only ordinary rations—army rations—because there is no provision for delicacies. Eggs are not provided, and butter, only twice a week. Grease from fat pork, with flour stirred in it, is made into a gravy for sick people for breakfast. Surely we are not civilizing sick Indians very fast! There are no reclining chairs in the hospital, and not a lounge.

The general health of the school at the time of my visit was good, better than for two previous years, doubtless largely due to the prompt, energetic measures of Colonel Learnard in removing pestilence-breeding nuisances. But at best the Indian youths inherit scrofula, have many offensive sores, sore eyes, tuberculous affections, and often the sad taint of constitutional syphilis, and therefore require good care, judicious food, and comfortable clothes. Bath-tubs and fine-tooth combs are important factors in their civilization.

The daily religious exercises consist of singing a Gospel song, reading a passage from the Bible, and offering the Lord's Prayer in concert. On Sunday all the school assembles at 9 o'clock for inspection, the pupils dressed in blue uniforms and moving in line. In the afternoon a Sunday-school is conducted by the officers and teachers. A stronger and more active religious interest is very desirable.

As in the other Indian schools, the educational department does not extend beyond what are commonly known as the primary and intermediate grades. Here, as elsewhere, we find the Indian pupils, as a whole, excelling in penmanship, and some in free-hand drawing. They also read quite well. Grammar or language is more slowly acquired, chiefly, I conjecture, because the range of mental conceptions with the Indian is very limited and he finds it difficult to conceive what English words stand for, the objects being beyond his mental vision. Pa-

tience, tact, and ingenuity in the positive, comparative, and superlative degrees, are, therefore, indispensable requisites in teaching. Patience the teachers in this school possess in a good degree, and considerable tact and ingenuity, but not in the highest degree.

Arithmetic is the most difficult study for the Indian, but there are exceptions. In this school the most advanced pupils were well versed in common and decimal fractions and some had a little acquaintance with percentage and compound numbers. The instruction is thorough and the teachers are painstaking. There are few poor teachers, though some are more energetic than others. The order and general discipline are good and a spirit of loyalty prevails. The jail is seldom resorted to—not at all for a long time—and there are few runaways.

This school has a literary society in which debates are conducted. The Indian problem and other great questions are often discussed and “settled,” and the speakers exhibit much genuine eloquence. But ample reading rooms are needed, well furnished with papers and books. The Indian mind as it develops should be supplied with materials upon which it may exercise itself.

The matron is an important factor in all Indian schools. It requires peculiar gifts and qualities to make a good matron. These qualities are possessed in a good degree by the matrons in this school. They are wise, laborious, kind, well-poised, and self-sacrificing. But I have recommended the creation of a new office for this large school, that of chief matron. The occupant is to have a motherly oversight of the boys, large and small, as well as the girls—one to whom they will look for counsel—a woman of culture and high ideals, of practical wisdom and tact, to exert the best refining womanly influence upon even the oldest of the pupils, and who will, also, give direction to the other matrons. Mrs. Haskell, the widow of the late member of Congress from the Lawrence district, Hon. Dudley C. Haskell, from whom this institution received its name on account of his great interest in Indian affairs, has consented to take this position. It is expected that Mrs. Haskell will bring to this position her large influence, sound judgment, superior heart qualities and culture, and incalculably contribute to the success of the school.

I purposely omit from this report many items, recommendations, requests for “authorities,” etc., which were forwarded to Washington at the time of my inspection, many of which have already been responded to favorably by the Department. The barns were almost in a tumble-down condition, and the bathing facilities a farce, because so meager. The quantity of milk was small. Only the prompt, stout resistance of Colonel Larnard several times in the past few months prevented imposing upon the school carloads of the meanest flour.

A word should be said in regard to the water supply. Wind-mills connecting with springs now furnish all the water, but how inadequate for bathing so many pupils, for steam, for cleansing such large buildings, for flushing the sewers; and, besides, there are no hydrants and hose in case of fire. Lawrence has a water company with a stand-pipe which would give 300 feet pressure at this point and the new building is piped to receive it, but it can not be connected because the Lawrence Water Company is not in a financial condition to meet the expense of running a pipe a mile from its nearest connection to the school. Such is the situation. What can be done?

It is our opinion that the greatest need of the 240 boys in the school is a habit of industry. On their return to the reservations they will find agriculture the most convenient and profitable avocation. We can

not too much emphasize this habit of industry as one of the greatest factors in the development of the Indian youth—not simply to know how to plough, plant, sow, etc., but to form a habit and acquire a love for work. For this, broad acres and continuous labor are needed.

The importance of the Haskell Institute can not be easily overrated, for it seems destined to play a large part in the future training of Indian youths in the trans-Mississippi region. Its land area, therefore, should be enlarged to give fuller scope for the labors of the Indian boys and increase the means of its own support; the very best teachers and employes should be selected; and it should not be subjected to the jealousies and fortunes of party politics. Nothing can be more absurd than to make the education and cultivation of Indian youth the football of politicians. Properly cared for and managed, this school will soon rival Carlisle in numbers and success, and be one of the most notable institutions in this great central section of the United States.

Bill of fare at the Haskell Institute, Lawrence, Kans.

Day.	Breakfast.	Dinner.	Supper.
Monday	Beefsteak, bread, gravy, coffee, rice.	Bean soup, bacon, potatoes, corn bread.	Cold meat, bread, dried fruit, sirup, tea or milk.
Tuesday	Bacon, gravy, wheat bread, rice, coffee.	Rice soup, bacon, potatoes, beets, corn bread, peaches.	Beef, mush and molasses, gravy, bread, fruit, apples, tea.
Wednesday....	Steak, bread, gravy, rice, coffee.	Vegetable soup, bacon, potatoes, hominy, corn bread, pickles, gingerbread.	Meat, bread, corn-starch, fruit, tea.
Thursday.....	Bacon, bread, oatmeal, dried fruit, coffee.	Potato soup, roast beef, turnips, hominy, corn bread.	Cold meat, bread, corn-starch, fruit, milk.
Friday.....	Beefsteak, gravy, bread, rice, coffee.	Vegetable soup, bacon, potatoes, beans, bread.	Meat, hotrolls, gravy, corn-starch, fruit, apples, tea.
Saturday	Bacon, gravy, bread, oatmeal, coffee.	Bread soup, roast beef, turnips, beets, hominy, bread.	Meat, gravy, bread, rice with fruit, tea.
Sunday	Beefsteak, gravy, bread, rice, coffee.	Soup, bacon, potatoes, beans, bread, butter, pickles.	Cold meat, bread, corn-starch, gingerbread, dried fruit, milk, tea.

THE CHILOCCO INDIAN SCHOOL.

This school, George W. Scott, superintendent, was visited May 31 to June 3. It is situated about 6 miles from Arkansas City and 4 miles below the south line of Kansas, in the Indian Territory, on the famous Cherokee strip, so renowned for its fertility and beauty. The school was founded in 1883; the main building three and a half stories high, built of stone, costing \$15,000, and the other buildings \$8,000, not including furnishings, etc. The land area devoted to this school is 9,320 acres.

Like several others, this school has suffered severely from being in the hands of persons who, though excellent, were not suited to its management.

I met two old residents in the neighborhood who expressed great satisfaction in the management of Mr. Scott. One said:

Before Mr. Scott came here, the farming was conducted worse than poorly. Language fails to describe the miserable slackness. Mr. Scott has taken hold with a firm hand and broad plans, and shows tact and skill. Besides the farming, the pupils are doing better, behaving better, are more courteous and orderly. Before Mr. Scott came they roamed over the neighboring estates in idleness, doing mischief, setting fire to patches of grass, etc. Under Mr. Scott everything has taken on a new character.

The other said:

Since Mr. Scott came there has been an entire change. Everything is managed excellently—far better than the average farms around us. This is the first year I

have seen a good garden. There is an air of enterprise and order, and business is promptly done. Before, on Saturday, the boys were running all over the country, but now they are in the field at work. When the boys and girls go out together there is always some employé with them. Mr. Scott is evidently at the head and has control over the institution.

These testimonials were purely voluntary and given with gladness.

This institution has the largest area under cultivation of any of our Indian schools. Two hundred and twenty-five acres are devoted to corn, 50 to wheat, 90 to oats, 15 to potatoes, 10 to millet, and 20 to garden. In June and July 150 acres were plowed for wheat next year. All this, besides several hundred acres which will be mowed for hay.

The stock consists of 10 horses, 10 mules, 4 ponies, 1 colt, 71 cows (60 giving milk), and 60 calves which are being raised. These with yearlings and steers make in the aggregate about 300 head of cattle. The fields of corn show careful cultivation. One Saturday, I saw 90 boys in the field. Besides farming there are tailoring, carpentering, and other industries.

The school exercises, however, have not reached as high a grade as could be desired. So many things needed to be done to bring the school into a living condition, that attention had to be principally devoted to external matters. The girls, also, were largely preoccupied in making new garments so that they might be in a comfortable condition. There are some excellent scholars and the teachers work hard and are faithful; but much of the teaching is not of the highest order. It is to be hoped that after the severe pressure of the first few months has passed the school work will be advanced. I found the religious exercises not what could be desired, but arrangements have been made under which it is hoped they will be improved, the ministers and laymen of all denominations in Arkansas City having kindly volunteered to assist each Sabbath afternoon.

The barns are entirely inadequate, the stables ill-arranged, and the cribs for grain too small. Lumber should be provided and separate shelter for part of the cattle erected.

The chapel, which is also the principal school-room, needs paint and other improvements. The water-tanks should be elevated 10 feet. The back wing or L of the building should be extended 30 feet at the full height and provision made for hose connection with the tank, for use in case of fire. Fire-escapes should be constructed. Much plastering needs to be repaired in the main building and in the houses of the employés. Shelter for coal, to prevent it from slaking and thus losing its principal value, should be provided. Closets are needed for the clothing of pupils and employés. Bridges constructed across the creek near the barn will save 4 miles of travel in hauling loads of hay and corn.

The hospital, now in the main building, should be removed to a separate building. This would afford accommodations for fifty additional pupils and avoid the spreading of contagious diseases in the school.

Half a dozen bath tubs for each sex should be placed in the L which I hope will soon be added to the main building. The present custom is for the matron to use laundry tubs and bathe fifty girls in an afternoon, and the disciplinarian superintends the bathing of one hundred boys by a similar slow process. Is not this an argument for bath-tubs?

It should be added that the expense of erecting the L I have recommended will not be very great because of an abundance of suitable stone, which can be obtained without cost about 2 miles away and hauled by the teams of the school. I hope the importance of this addition will be appreciated, and that this school, with its remarkable sur-

roundings and magnificent possibilities, will be generously cherished by the Government until it becomes one of the very largest Indian schools.

THE KAW INDIAN SCHOOL.

This school at the subagency connected with the Osage Reservation, about 25 miles southeast of Arkansas City, was visited June 4. I found here 41 pupils enrolled, 31 of whom are children of the Kaw Indians. The pupils range from seven to sixteen years, only 5 above twelve years. As elsewhere, the older boys work in the fields a half day and all the pupils do something. The girls do housework, washing, ironing, sewing, cooking, mending the boys' clothing and making part of it—shirts, etc. I found this school better supplied with underclothing, dresses, bedding, etc., than any other I had visited; 72 surplus blankets, which had never been used, but were badly moth-eaten, were piled away by themselves.

Thirty acres of corn and 25 acres of millet are under cultivation. There are 5 mules and 19 head of cattle connected with the school.

The buildings are in such a deplorable condition and the need of repairs is so great and in so many places that I will not attempt to specify. The sanitary condition is very bad on account of defective drainage. I talked with the agent, Mr. Miles, about these things and prompt steps have been taken for extensive repairs and improvements in the premises.

The food given to the children consists of meat three times a day, chiefly bacon, though beef in winter, with hominy, rice, beans, wheat-bread, milk, and coffee. The bread which I found at this institution was the worst I ever saw, looking more like decayed chestnut wood than anything else, and about as hard, and the pupils were the most unhealthy children, more than one-half affected with sore eyes.

The tribe will not soon, if ever, recover from the bad consequences of allowing its young men, a few years ago, to go off for exhibition through the country. They were gone one season, and came back thoroughly diseased with syphilis which they spread through the tribe. The tribe has since run down more rapidly than before. In the year 1884 the number of births was 15 and of deaths 35; of the 15 born only 2 lived to be six weeks old. When the Kaw tribe came to this place from Council Grove, Kans., seventeen years ago, they numbered over 500; now they number 194, including half-bloods. Then they had 8 chiefs; now only 2. The tribe is largely pagan, with its medicine men, pagan dances, etc.

OSAGE SCHOOLS.

In this agency there are four schools, one supported by the Government and three contract schools. Two of the latter are Roman Catholic and the other is under the supervision of the Woman's Home Missionary Society of the Methodist Episcopal Church. I visited these schools June 6 to 9.

The Government school was founded in 1873. The buildings are large and commodious, but in a poor condition, not having been repaired for a long time. A comfortable hospital stands a little distance from the main edifice, and a very poor barn is in an out-of-the-way place. It would be impossible to describe at length the repairs and improvements needed. Major Miles, the agent, and I have talked over the matter at length, and extensive repairs are now in course of making.

The industrial department of this school does not amount to much, except among the girls, who are taught housekeeping and how to make and repair garments. There are no shops for boys and little tillable land connected with the school. The very conservative character of the Osage Indians and their opposition to the instructing of their boys in industrial work make it difficult to do much in the department of outdoor labor. In no other tribe of Indians do such strong prejudices exist as among the wealthy Osages—the wealthiest people in the world, with an average of over \$5,000 per capita to their credit on the books of the Government.

Much to my surprise, I found the scholarship in this institution to be exceedingly poor, and but one or two of the teachers seemed to have anything more than moderate teaching ability. The scholars were unaccountably dull and our best efforts to make them talk, recite, or read seemed well-nigh unavailing. There was nothing cheering in the edifice, all the rooms being worn and dilapidated. It seems unaccountable that superintendents and agents should have allowed these buildings to fall into such a condition, but the late superintendent has had an unequal contest with obstacles beyond his control.

The following programme of work will be of interest:

A work-day programme in the Osage Boarding School.

Rising bell.....	a. m ..	6.00
Breakfast.....	do.....	7.00
Boys' police school grounds.....	do.....	8.00
School and labor *.....	do.....	9.00
Recess.....	do.....	10.00
School and labor *.....	do.....	10.45
Dinner.....	m.....	12.00
School and labor *.....	p. m ..	1.30
Recess.....	do.....	2.45
School and labor *.....	do.....	3.00
Recreation, drills, etc.....	do.....	4.00
Supper.....	do.....	5.00
Marching exercises and gymnastics.....	do.....	6.00
Study hour.....	do.....	7.00
Roll-call and retire.....	do.....	8.00

In February last the Roman Catholic school located at this place, called the St. Louis Boarding School, was suddenly burned to the ground. Only the foundation remains. The pupils were absorbed in other schools. Steps have since been taken to rebuild the edifice at a point about a mile distant, beyond the creek.

In the same village of Pawhuska is located a mission school under the supervision of the Woman's Home Missionary Society of the Methodist Episcopal church. Mrs. F. T. Gaddis is the superintendent. This school is in very inadequate buildings, but it is bright and cheerful within; the teachers are competent and the children are making rapid progress. The classes in reading, spelling, definitions, and geography particularly excelled. The school needs maps and more room. The religious element is prominent in this school, and a wholesome cleanliness accompanies godliness.

At a place called Hominy, 15 miles distant, but within the Osage Reservation, is another contract boarding-school kept by the Sisters of St. John of the Roman Catholic church. It is located in a wild out-of-the-way place and numbers about 25 pupils. They are all in the primary grade of studies. All the buildings wore the aspect of tidiness and the pupils seemed healthy, orderly, and industrious.

* Half the pupils at work and half in school alternately.

THE PAWNEE INDUSTRIAL BOARDING SCHOOL

was visited June 10 and 11. I found 84 pupils enrolled, 46 boys and 38 girls. The school has increased from 47 last September. Nearly all the Pawnee children of school age are said to be in some of the Government schools. This tribe of nearly 900 Indians is making quite rapid progress towards civilization and rapidly discarding the blanket.

The industrial work of the boys is confined to farming, except the assistance rendered around the house. I found here 50 acres of the best corn I had seen in my journey, 8 of oats, 6 of millet, and 10 of garden vegetables. The school has 56 head of cattle, but the cows are mostly very poor in quality. The boys work well.

The school has been embarrassed during the year, because the estimates and appropriations last year provided for only 60 pupils, but as the number increased to 84 they have been short of shoes, hats, bedding, and some articles of provisions. Only two bathing tubs exist, which is a great embarrassment. As a singular circumstance, we found pins enough in the storehouse to last one hundred years, and flat-irons for a generation. Bed ticking, shawls, and blankets were also abundant. There are good hospital rooms, but they should be in a building separate from the main edifice. There has been little sickness during the year, and only three deaths.

The industrial work of the girls is confined to housework and sewing. I found here two very skillful teachers, particularly skillful in teaching a new language, for most of the pupils were fresh from the tepees. The pupils seem to easily learn to sing the gospel songs and to enjoy singing them.

There should be many repairs and considerable enlargements in the buildings. There is no room for an office. A superintendent with a family can not be made comfortable. The dormitories are not large enough, being so crowded that 39 girls sleep in 13 beds. The water tank and pipes need to be thoroughly repaired. This is a very urgent case and many repairs, almost all over the buildings, are needed.

It is hoped that an enlargement will be effected this season.

THE OTOE SCHOOL

was visited June 11 and 12. It is located in a tribe fast advancing to a condition to receive lands in severalty. They are discarding "the blanket" and polygamy is decreasing. The Otoes are much healthier than the Pawnees; their children are brighter, with few cases of sore eyes, and pneumonia and consumption are not as frequent as in some Indian tribes.

The school has 48 pupils, 24 boys and 24 girls. There are enough children outside of the school to justify the employment of another teacher. The boys are small, few being large enough for farm work, but 20 acres of corn have been planted and a liberal supply of other grains as well as vegetables.

The superintendent, matron, teacher, and other employes are among the best. The teacher is particularly efficient, interesting, and ingenious in her methods for conveying English to Indian minds. The school buildings are excellent, being nearly new. Little is needed but some concrete for walks and, possibly, a hospital, though there have been no sick children in the school for some time. There should be a large cistern for water, because the water used is unusually hard. On the whole, this school is in an interesting and flourishing condition.

THE PONCA BOARDING SCHOOL.

This school was visited June 12 and 13. The pupils are 41 boys and 33 girls, and the children of the Ponca tribe are nearly all in Government schools. A considerable amount of industrial work is performed, 50 acres of ground being under cultivation. The stock consists of 16 head of cattle, 5 horses and mules, and 55 hogs.

The school exercises under one of the teachers were very creditable, but the others very inferior. An Indian girl, educated at Mr. Moody's school in Massachusetts, was the principal factor in the instruction of these Indian children, and her work deserves commendation.

There was good order among the children in the school-rooms, but outside they seemed to slip easily away from the grasp of the superintendent and were allowed to roam too freely in the village. Some associations among the Indian help were very unfavorable to good morals, and it was tolerated with the knowledge of the superintendent and the agent. Indeed, the morals of this agency are reprehensible. Sabbath services, conducted by a missionary, are generally disregarded by the whites, and reports of credible witnesses say that gambling for money has been allowed.

Here, as in some other places, bath-tubs are utterly wanting and the pupils do not appear healthy. The flour was bad and the bread poor. Chapel exercises are conducted four evenings in a week, with Scripture readings, the Lord's Prayer, and singing. There is no hospital, but the superintendent reports that there has been no serious case of sickness during the year, though there is a great deal of hard coughing among the children.

We found here a Ponca girl, fifteen years old, who has been bargained by her father for a pony to be the wife of one of the meanest Indians, fifty years of age. The girl is fighting against it, and dreads to leave the school buildings lest the bargain will be consummated by force. Five other girls in this school of the same age are exposed to the same liability when they return to their homes for vacation.

There should be an extension of the L of the brick building to afford assembly rooms for the young people and for bath-rooms.

I found here stacks of school-books for which they have no use, too far advanced or out of date. The school force is not large enough. A school of over 80 pupils should have three teachers.

THE ARAPAHO INDIAN SCHOOL.

This school, located at Darlington, Ind. T., near Fort Reno, was visited June 19 and 20, just as the children were about to leave for the summer vacation, and one teacher had already gone home. It was, therefore, an unfavorable time to judge of the scholarship. We heard some recitations which, of course, were out of the usual order and made a general examination of the pupils, from which we formed the opinion that considerable good work had been done and fair progress made. But the school is of low rank.

When we arrived at the school the pupils were widely scattered, being allowed to run at large in the village and to the Indian encampment just over the river. This is one of the evils in this school. The encampment just referred to is of the most lazy, non-progressive band of the Arapahoes, and the Indians from the camp come into the school buildings whenever they please and often linger long. This constant intermingling of the pupils with these low-class Indians is a great drawback

upon their improvement. The school should be secluded by a high fence at such distance around as to afford a suitable play-ground for the pupils inside, and no persons from without should be allowed to enter, except at specified times. Until this is done the best improvement will be impossible.

Moreover, every night the Indians in their encampment hold their strange orgies—dancing, yelling, piping horns, etc.—to a late hour, all within distinct hearing of the children in the school, and some of the large boys were allowed to be out until a late hour at night, in attendance upon these barbarous performances. Imperative orders should be issued forbidding the encampment of Indians within 3 or 4 miles of the school, and the pupils from freely visiting the village.

The industrial part of the school has not been pushed very energetically, only 25 acres having been under cultivation this year, though there are large opportunities.

The school buildings, aside from the school rooms, are in a poor condition. Paint is needed within and without, for the buildings are wooden. Plastering should be repaired; new floors put in, and some enlargement of the main building, to afford place for bath-tubs, assembly room for the pupils, reading-rooms, etc. The house occupied by the superintendent is in a shamefully dilapidated state, and is too small, containing only three rooms. The out closets are a nuisance, notwithstanding repeated appeals, I was told, have been made to the agent, and also to the Department at Washington. I was informed that in 1887 the subject of improvements, repairs, etc., was considered, the agent and carpenter, book in hand, examining and estimating. Nearly every inspector coming to the agency has had his attention called to it, but nothing has been done. It has now become a very urgent matter if we would civilize the young Indians, and even if we would preserve the buildings.

I found the Arapahoes slowly advancing towards civilization. About one-half of the adults wear citizen's clothes and many others are in half-citizen's dress. Some are industrious, as large cultivated fields and comfortable houses testify. Few of them now roam and polygamy is declining.

THE MENNONITE INDIAN BOARDING-SCHOOL,

located half a mile away from the Government school, was also visited. It is under the superintendence of a most estimable gentleman, Mr. Henry R. Voth, who is also superintendent of another Mennonite Indian School at the cantonment, 60 miles away. In each of these schools there are 50 pupils, but at the cantonment a new edifice is being built for the accommodation of 75 pupils. The school in Darlington is situated upon a tract of rich, well-cultivated ground abounding in a nice variety of fruit-trees, which have already come to bearing.

The instruction given at this school is excellent and thorough, and by faithful Christian teachers. The children are not allowed to roam over the fields or visit the village without permission.

THE CHEYENNE BOARDING-SCHOOL,

three miles from Darlington, was visited June 21. It is delightfully situated on high, healthy ground commanding a vast prospect, with the famous "Caddo Spring" near by, sending forth a copious stream of water, the coolest and purest probably in a radius of several hundred miles. Formerly, this was a large school with 120 pupils, but it has

been neglected and ill managed. The last superintendent disappeared in the Oklahoma craze, in April, and the school was left for a month in the care of the industrial teacher, already burdened with numerous duties. The pupils had dwindled to 35 when Mr. L. D. Davis, the present superintendent, came. He raised the number to 70 in a month and proved himself the right man in the right place.

The school was about ready to dismiss for the summer vacation but we heard several recitations, reading exercises, etc., which were very satisfactory, showing good work by the teachers. I liked the appearance of these Cheyenne pupils. They are bright, acute, and chaste. I am satisfied that among this tribe there is great encouragement to put forth large outlays and efforts.

The buildings are sadly in need of extensive repairs. The plastering is off in large places all over the house. Doors, floors, window-sills, and piazzas need repairing. There are only two bath-tubs. Girls are without night-dresses. Better gingham should be sent; those sent look shabby after washing and do not wear well. Mr. Davis has estimated for many needed things which ought to be granted.

The Cheyenne and Arapaho schools deserve larger attention from the Government. These two tribes comprise 3,300 Indians, of whom 900 are school population. The two Government schools should be filled to their capacity, and then 125 can be allowed in the Mennonite schools, and a liberal supply can be sent to the large industrial schools outside of the Territory.

THE GENOA (NEBRASKA) INDUSTRIAL SCHOOL,

W. B. Backus, superintendent, was visited July 1 to 3. The school had entered upon its summer vacation though most of the pupils were on the ground, as is the case in most of the large industrial schools. They were called together and some school exercises were held, though at a great disadvantage. We heard some very good reading, and the responses to questions put by myself in arithmetic, geography, etc., were such as indicated good study and progress.

Mr. Backus came to the superintendency April 1, 1889, after the discovery of the financial irregularities of his predecessor. These things demoralized the school, depriving the pupils of their small earnings and producing such discontent and resentment that the officers with great difficulty controlled it. The pupils were especially reluctant to work and were also unfitted for study. Probably not 50 boys and none of the girls had received any compensation for their labors for over a year. It was difficult to keep them from running away. Nevertheless, by great exertion and tact, the girls were kept at their posts sewing and performing the housework, and the boys, under the lead of the farmer, planted and cultivated 120 acres of corn, 35 of oats, 20 of millet, 15 of potatoes, and a large patch of garden.

This is a large school with 175 pupils—103 boys and 72 girls.

As a whole, the Genoa school has one of the best collections of buildings in the Indian school service. The shops for tailoring, shoe-making, carpentering, painting, etc., are excellent and well arranged. Good work is done in them. The school-rooms are also good and in fair condition, likewise the dining-hall and the girls' dormitory. The boys' dormitory is altogether too small. The boys' "assembly room," as it is called, where they gather, is a small, cramped place, not half large enough. This is under their small dormitory. Both difficulties can be removed by putting on an addition to that wing, about 40 feet, directly

in the rear, or until it reaches the dining hall. The physician reports that the atmosphere of the boys' dormitory is stifling, because so small for the number necessarily lodging in it. This addition would afford a place for a suitable assembly room in the basement, and also a good reading-room, so much needed. A drain-pipe for sewerage is a great necessity.

A school of this size also needs a disciplinarian.

This school, with Haskell Institute, and Chillocco, and possibly one more now building at Pierre, Dak., ought to be the great industrial schools between the Alleghanies and the Rocky Mountains. Its buildings, with some enlargement, and its location both favor it. It should be wisely and liberally provided for.

THE WINNEBAGO SCHOOL

was reached July 5, but it had been dismissed for the summer vacation. It was not in vain that I had come, nevertheless; for I had extended interviews with the superintendent, matron, teachers, and other employés, and examined the buildings and the general situation. The school has averaged the last season 75 pupils; full enrollment, 87. This is one of the most difficult schools to manage because of the lying, thieving, and unchaste propensities of this tribe, and they have hitherto been allowed free access to the school buildings, while the pupils have also been allowed to go home almost every week. I have recommended that a high fence be put around the school building with barbed wire protection, and that pupils be not allowed to visit their homes oftener than once in eight weeks.

The buildings are in good condition, but I have advised that provision be made for bath-tubs. The well needs to be dug deeper, so as to obtain a larger supply of water. A strong wind will pump it dry in twenty minutes. We found at this school some strange assortments of clothing, cloth, etc. There are overcoats of the size 42, which of course no boy can wear. A large quantity of Fifth Readers is piled up which are not used in any Indian school, while Primers and First Readers are lacking. The supply of gingham and calicoes was short.

About 50 acres are under cultivation. The stock of cows, hogs, and horses is too small.

Among the tribe the allotment of lands in severalty is in its inceptive stage, and there are good indications that with a firm hand on the part of the agent it will prove a success in due time.

THE OMAHA INDIAN BOARDING-SCHOOL

was visited July 9, but the pupils were absent on their vacation. The superintendent, matron, and industrial teacher were present, and the agent of the reservation, Colonel Warner, who aided me in examining the situation. The building was one of the cleanest I have found. The hard-pine floors which Colonel Warner had put into this building, and also in the Winnebago school building, are wearing splendidly and looking well. I found here, as in many other places, the need of bath-tubs, and recommended the Commissioner to order their introduction. There is much trouble here, as at Winnebago, from the running away of the boys. There is no hospital.

The recitation building is one-fourth of a mile from the main edifice. It should be moved down to a near point. The out-closets need to be reconstructed. Plank or cement walks should be laid. More farming

should be done. Twenty-six acres is too little for a school of 86 pupils. Another pair of horses will, however, be necessary. The work can not be done with the poor team now there. The school should be secluded by a high fence, and pupils not allowed to go home so often.

THE OMAHA PRESBYTERIAN MISSION SCHOOL

also received a visit from me. It is located in a very wild and romantic but pleasant region, under the high bluffs of the west bank of the Missouri, in a dense thicket, back from the shore, where it was founded as a mission school in 1856. For eight years Mrs. Wade has been its superintendent, aided by several very capable and estimable ladies. The pupils have averaged 45, and good work has been done.

IN GENERAL.

In reviewing the schools which I have visited, several things impress me.

1. In 12 of the 20 schools I was unable to find traces of any visit by a general superintendent. The local superintendents and teachers have toiled on at their distant outposts, patiently and for the most part faithfully, without direct contact and sympathy with the office at Washington, except by correspondence and occasional visits from Government inspectors at the agencies. The condition and needs of the buildings, the uncomfortable quarters oftentimes, of teachers and pupils and many other things of vital interest, have been imperfectly known, and could, therefore, be little appreciated at Washington. It should not be forgotten that teachers, like other people, appreciate friendly notice, kindly suggestions and sympathy. It is a wonder that in such cold, isolated circumstances they have done so well. The Government should bring these schools nearer to its heart by frequent personal contact.

2. The reservation schools have impressed me as the most important. If this seems to any one a strong statement, let it be considered that this class of schools, as a whole, contain the great majority of our Indian pupils; that hitherto a large portion have never gone to any other school; that the difficulties growing out of such close contact with their homes, seriously embarrass the teachers; that in these schools the first lessons in English are taught, a process necessarily slow, requiring great patience and ingenuity on the part of the teacher.

3. The teachers sent to the reservation schools should be persons of originality, ingenuity, and fertility of thought, acquainted with the latest and best methods of our normal schools, familiar with object lessons and kindergarten teaching. In too many cases teachers in these schools have been utterly destitute of these characteristics, and by dull, unsympathetic, and unsuggestive methods, have tried to inject English ideas into young Indian minds. The blank, stolid faces of the pupils show that no impression is made. The very highest talent is necessary in this work. Only those who have good knowledge and experience in the best primary methods should undertake it. To teach white children is far easier, for the Indian child knows not our language. But the usefulness of a teacher of young Indians depends more upon native qualities and personal character than upon literary attainments. Too often political and sectarian affiliations have determined the selection of these teachers.

4. To scale down the wages of the reservation teachers, therefore, is unwise, for the more these schools are raised in quality the greater will be the supply of pupils to the large industrial schools. The great uplift must be in these primary schools. The services of teachers in Indian schools are more laborious than in most other schools, and demand greater personal sacrifices as well as greater devotion and ability. The best teachers can not be obtained if the compensation runs low.

5. I have noticed in most of the reservation schools, and also in some of the larger training schools, a want of suitable assembly rooms in which the pupils can gather, something similar to the sitting-room in our homes. It will not answer to drive them to the dormitories. In some of the institutions there is almost no provision of this kind; in others it is very meager. Sometimes it is underground, with only a few hard benches, no curtains at the windows, with neither books nor papers, with no pictures on the walls, and so small and crowded that the little boys and girls are often trampled and ill-used by the larger. It is impossible to describe the pitiable condition of these rooms in which the enlightened people of the United States, who are unacquainted with the facts, presume that a higher civilization is being promoted. It will be of little use for boys and girls to learn to read, unless at the same time they acquire the habit and love of reading. How essential are these to that intelligence and culture without which they can never become leaders of their people. A constant supply of suitable reading matter alone can keep the pupils from deteriorating.

How would this work of improvement be facilitated, if larger rooms could be provided, neatly painted, furnished with tables, settees, books and papers, and the walls adorned with pictures! Congress might have to appropriate a little more money, but would not the aroused sentiment of the nation on the Indian question sustain the Congress voting it rather than the Congress denying it?

6. I desire to emphasize a matter already referred to in preceding pages, the importance of more fully secluding the schools on the reservations from the visits and influence of the neighboring Indians. It is well known that many of our best educational institutions in the States are secluded from the intrusions of the outside public by fences, gates, and stringent regulations. How much more needful when we are attempting to divest the young Indian of the uncivilized ideas and habits of his tribe. The pupils should be allowed to visit their homes less frequently and to receive calls from friends only at stated times, and should never be left to run around the agency village. These are serious evils in many places, counteracting in a great degree all efforts for good.

7. What becomes of the Indian pupils who graduate from the schools and return to the reservations? This question is variously answered. From the Lincoln Institute in Philadelphia we have the reply:

In general they are conducting themselves well, either working at home or for other people. The great difficulty is to find suitable work on the reservation.

Mr. Hamilton Wright Mabie, in the July Century, said:

The results at Hampton and Carlisle have settled the question of the capacity of the Indian for education. During the last decade Hampton alone has trained with more or less thoroughness more than three hundred students who have been under its culture from a few months to five or six years. The record of these students has been carefully preserved, and that record shows that the great majority, in the face of almost insurmountable obstacles, are exercising a wide and beneficent influence on the communities through which they are scattered, and are doing faithfully and successfully the work of pioneers in the civilization of their people. As teachers, clerks, farmers, interpreters, scouts, and cattle-raisers they have attained, all things

considered, an average success quite as high as that which would have attended the labors of an equal number of whites. The record of Carlisle's school would undoubtedly make as favorable a showing as the record of Hampton.

To the foregoing I might add individual instances of high, strong character coming under my own observation. Nevertheless, I must say that I have seen many painful cases of returned students who have lapsed into the gross conditions of the old-time Indian life. The importance of providing against this has impressed many minds familiar with the circumstances. What can be done is the question. One plan is to extend the period of education from five to ten years, according to the age of the pupil. This will doubtless meet many cases, but a more radical and important step is for Government to effect certain changes among the Indians which will guard and strengthen the pupils when they return to their homes. This is a matter deserving study. It is hoped that the severalty allotment plan will help, and that this plan will be carried out among numerous tribes already well prepared for it. But other measures will be needed.

I am justified in dwelling upon this topic at greater length, because by the act of March 2, 1889, referring to this office, it is incumbent upon me to report in regard to the "means for the most effective advancement of the (Indian) pupils towards civilization and self-support."

The falling away of the graduate pupils, so often referred to by those who discredit and oppose the efforts for the education of Indian youth, is not the fault of the schools but the condition of the agencies and reservations. It could hardly be expected that tender youth, going back to their wilderness homes after a short time in school, would be able to withstand the immense downward gravitation felt everywhere around them, especially as it is difficult for them to find the opportunity to earn means for maintaining the customs of civilized life. If the adult Indian is proverbially lacking in individuality and self-reliance, how much more the young Indian. Many Indian agents have rendered little aid to the returned pupils. The source of the difficulty is wider than heretofore intimated and the remedy must be deep, broad, and manifold. Will it take time? Yes, indeed; but how much will depend upon what we do to help. Should we not shape measures towards that end and introduce them into the reservations?

The return of the educated youth to "the blanket" and other usages of old-time Indian life, after the Government, by education, has elevated them to the intelligence and customs of civilized life, should be stopped, if necessary, by stringent measures. To do this would be in the line of self-respect and self-maintenance on the part of the Government. How can the case be met? Generally the reason these pupils return to "the blanket" is that they are persecuted by their parents and friends. Take an individual case coming to our knowledge: Two young girls returned from Carlisle were found in a large "tepee," in an apartment by themselves, cooking their food by themselves, and eating separately from the rest of the family, discarded and ridiculed day after day. The girls were standing their ground well, but how long could they endure it, in their dependent condition? And what agony must they have suffered through that painful experience? In order to break up such doings let the Government proclaim that any pupils returning from school and re-adopting blanket life shall be deprived of their annuities. The parents would appreciate that course; and if this is not enough, let the whole family be deprived of the annuities. This would put an end to the whole blanket life in a short time—an immense step towards civilization.

While the foregoing statements are all true and of urgent importance, nevertheless, I would not leave the impression that a large proportion of the returned students have lapsed from the high character in which they have been trained. By no means. As I have gone through a large number of reservations I have found everywhere splendid examples of cultivated Indian youth, running well the race of life, and reflecting great credit upon the schools where they have been educated.

Another retrograding step in the case of returning pupils is polygamous life, under which the girls are traded for ponies into a plural marital condition. An eye witness related to us the wedding of a returned student to two girls of twelve and fourteen years respectively, on the same day. Often these girls are traded into plural marital relations with old men. What comes of all the Government has done for such girls? Doubtless some residuum of the good education will sometimes remain and be carried into the life of the tribe in the next generation, but how often will the lapse be to a lower depth—a revulsion to a worse state. I have repeatedly made this inquiry of some of the better agents on the reservations. One of them, a man of large experience and honorable record as an Indian agent, said: "Let the President of the United States issue a proclamation against any more plural marriages among the Indians. I could enforce it." "How?" I asked. He replied: "By withholding the annuities from those who violated the law. They would at once submit." Other Indian agents have indorsed this view. This provision could be soon supplemented by a requirement that marriages should be legally solemnized and recorded. These important steps would be other long strides towards civilization.

The breaking up of the more offensive features of the tribal relation is destined to follow the severalty allotments, and with that also must come, in time, habits of industry, individuality, and self-reliance, all of which will be conserving forces to strengthen the Indian youth upon whom the Government confers culture.

One thing is conclusively settled, that the brief period of three years at a government training school is not enough to establish a young Indian in a new type of character, and prepare him to return and withstand the downward gravitation of the old reservation life. The supposition is absurd. The period must be extended to five, eight, or ten years, and it should be coupled with a more extensive "outing" system, by which the advanced pupils may be distributed, under a wise supervision, among respectable white families in the older States. The education of the Indian should go on side by side with that of the whites if we are going to make these youth strong to stand in the new regimen and to act with us politically and socially on the same conditions. The boarding school is an excellent preparation for the "outing" system. Intelligent Indian workers are maturing plans for distributing many Indian youth in the older States. They are to be placed in good homes where they will earn wages, be advanced in culture, and become established in character, under a system of constant, wise, and helpful supervision. This great desideratum will help to solve a pressing inquiry.

(8) Especially must the agencies be improved; for if we would have respectable schools and keep our graduate pupils respectable and strongly established, we must make for them respectable agency homes.

I take no exception to the agency system, nor to good agents, but in numerous instances bad agents have used their power to the detriment of the schools, interposing directly between the superintendent and the teachers and other employés, in matters pertaining *solely to school exer-*

eises and discipline. It will be perceived that no school in which the officials are so hampered can succeed. The power of the agent thus to do should be limited, and great care should be taken in the selection of agents. Larger salaries would help to get better agents.

Ever since this work of Indian education and civilization began the Indian agent has been an object of criticism. Holding a position of great importance in the reservation, with large power and ample opportunities for useful and beneficent influence, nevertheless it must be confessed that sometimes the Indian agent has stood stoutly in the way of real improvement, proving himself a deteriorating factor. The cases are not rare in which the agent has been a thorn in the side of the superintendent of the school and the missionary, rendering their efforts nugatory.

Let me picture a typical but not a personal case. A new agent arrives at the agency. Very soon he shows a dislike for the superintendent of the school, for the matron and some of the teachers. He leaves no stone unturned to make their positions uncomfortable. An earnest, faithful, Christian young lady teacher is vilified and crowded out, to make room for a favorite who has no fitness for teaching or desire to benefit the pupils, but who can occupy the place and draw the salary. Other employes are removed to make place for persons of the agent's liking. Gradually the influence of the superintendent is crippled, and he finds himself presiding over an insubordinate corps of employes and the insubordination countenanced by the agent. After a time an industrial teacher is appointed who is dissolute, profane, and drunken. Sustaining close relations with the boys in their work, he inoculates them with his evil virus. Every day they hear the most horrid oaths. The superintendent interposes for the protection of the boys, but finds himself the victim of a conspiracy to involve him in insurmountable difficulties by the foulest means, as a pretext for his dismissal. He has the love and respect of the pupils, but must be driven out that the agent may put at the head of the school one who will be his tool. The faithful superintendent steps aside, and the advent of his successor ushers in more immoral practices, for the corrupt regimen is now fully in the ascendancy. Baseness becomes current where the forces of the best civilization ought to have their radiating center.

Why should I specify? We know too well. A few good people protest and make themselves heard at Washington, but draw direful vengeance from the agency. They ask for a better agent, but the old one has friends of large influence at headquarters, and he is not easily dislodged. The Department finds it hard to discriminate between the conflicting stories, and the old agent retains his place.

An intelligent, refined, Christian woman, on one of these remote stations, in a letter under my eye while I write, says:

Is there no way by which upright, pure, true and moral men can be secured to represent the Government among the Indians? Must this ignorant, degraded people be debauched by those who should be their leaders and helpers? To say nothing of Christianity, can we not have men who are decent and upright? Even the Indians sometimes say they do not wish to send their children to dwell amid such influences—a dreadful accusation for heathen people to make against agencies and schools planted for their elevation.

This sketch is mildly drawn. Such have been too often the conditions amid which the Indian schools have dwelt. I have introduced this topic in the interest of the great reform which I believe the administration is seeking to produce, and which is of prime importance to the success of the Indian school system, and the true elevation and civili-

zation of the red men. The agencies should be centers of refining influences, and therefore the agent should be a man of high character.

* * * * *

10. While the industrial part of Indian education is exceedingly well carried on in some of the schools, there are others in which it receives too little attention. Especially should the farming be more extensive. The ample acres should be made to yield larger incomes. The stock should be increased, made more productive, and the boys trained to care for it. They should also be trained more thoroughly in gardening, and taught to raise a larger variety of vegetables. This would be especially civilizing, for the wild Indian does none of these things. It would also be good husbandry, good economy, and promotive of health. Not the least good would be the formation of habits of industry. Instruction in the ways and manners of civilized life and in the industrial arts is more important than mere literary proficiency. This line of instruction ought to be increased. The industries of an agricultural people, with good manners and morals, should rank highest of all in the curriculum of Indian schools.

11. The irregular and sometimes objectionable methods practiced in obtaining pupils for the large industrial schools has been a topic of frequent criticism. In the eagerness of the agents of these schools to fill up their quota, returned pupils who have spent five or more years at some industrial school are sometimes gathered into another school of the same kind. Some indolent young Indians are only too glad to be supported a longer time by the Government. It is often the case that very young children whose proper place is in a reservation school are gathered into an industrial school. Coming so early in life, they are still too young when their five years have expired to go back to their uncivilized homes and withstand the unhelpful influences which will there surround them. Had they passed through the primary course in the reservation school and gone from there to the industrial school, they would have reached greater maturity before going out into the battle of life. Such young children also are not able to reap the advantages of industrial training. Moreover, in the eager haste to swell the number of recruits, feeble and diseased children are often gathered in, only to be returned soon to their homes at Government expense, or to die in the hospital after a lingering sickness.

How can these evils be remedied and the work of securing the annual supply of pupils be systematized? In pursuit of information on this point, my predecessor issued a circular to the superintendents of schools and to the agents on reservations that he might obtain the necessary data from which to prepare a system of regulations for the better control of this practice. His circular was issued November 21, 1888. Mr. Albro's official services ended before he had completed this work. It is said that he received about eighty returns. I have endeavored to avail myself of them and ascertain what light they would throw upon the subject, but after the most exhaustive search in the office they could not be found. The inquiry is still unanswered.

12. One of the urgent duties of the present is to ascertain what portion of the Indian youth are not yet supplied with the means of education and where they are located. Probably about one-third of the forty thousand Indian school population are now enrolled in school. But a new kind of life is fast coming in upon the Indian race. In this new environment they can not live as their fathers did, nor be like their

fathers in power to sustain themselves and maintain an independent existence. They can not even be the equal of their fathers in character or happiness unless educated, for the coming situation is to be different. It is morally certain that without education, moral and industrial culture, they will be more degraded and brutal, the most odious of vagabonds and beggars, augmenting an already large class of dependent and offending populace. There is no time to lose in this work. Where are the needy areas of Indian youth not yet gathered into our schools? It is hoped we will soon have a census of the Indian population sufficiently correct to enable us to intelligently analyze the situation.

These destitute localities should be visited at once and discriminatingly inspected. In the most urgent and promising, foundations should be laid for school provision. This is the more urgent, because the worst elements of our civilization are rapidly reaching these people and their environments are fast changing. The better elements of our life, therefore, should also be brought in to lift them up, to strengthen them, and enable them to withstand the destructive forces they are called to encounter, and to run well the race of life.

Is it said "The Indian race is rapidly wasting away?" Yes; but a large residuum in the tribes which have already disappeared in their organic forms has entered into our existing populations; and a very considerable element in our present Indian population, much of it probably in fractional bloods, and not a little also in pure bloods, if well fostered, will yet be absorbed into our national life. It must be so. The Indian has long been a part of our past life, and has had his representatives in high positions, from the United States Senate down to the lower legislative bodies, and in educational, editorial, and ecclesiastical affairs. Nor have his representatives been disparaged when they have possessed only a fraction of his noble blood. So also the Indian must be a part of our national future—one of the many increments making us what we are yet to be.

It is, therefore, a practical question,—In what condition shall the Indian be absorbed into our life; diseased, degraded, and debauched, or elevated, enlightened, and ennobled; hateful or helpful; faithless and frail or full of faith and fortitude; a pauper, a vagabond, a criminal, or an intelligent, industrious, and loyal citizen? The answer will depend upon the manner in which the Government pushes forward its educational and other civilizing work among our Indian populations.

All of which is respectfully submitted.

Yours, etc.,

DANIEL DORCHESTER,
Superintendent Indian Schools.

HON. THOMAS J. MORGAN,
Commissioner of Indian Affairs.

REPORT OF THE COMMISSIONER OF PATENTS.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, September 16, 1889.

SIR: I have the honor to submit the following report of the business of this office for the fiscal year ended June 30, 1889:

Applications for patents received.....	36,740
Applications for design patents received.....	808
Applications for reissue patents received.....	101
Applications for resigtration of trade-marks received.....	1,291
Applications for registration of labels received.....	772
Caveats received.....	2,345

Total.....	42,047
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Number of patents granted, including reissues and designs.....	21,518
Number of trade-marks registered.....	1,111
Number of labels registered.....	312

Total.....	22,941
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Number of patents withheld for non-payment of final fees.....	2,858
Number of patents expired.....	11,920

RECEIPTS AND EXPENDITURES.

Receipts from all sources.....	\$1,186,557.22
Expenditures (including printing and binding, stationery, and contingent expenses).....	999,697.24
Surplus.....	186,859.98

BALANCE IN THE TREASURY OF THE UNITED STATES ON ACCOUNT OF THE PATENT FUND.

June 30, 1888.....	\$3,337,666.65
June 30, 1889.....	186,859.98
Total.....	3,524,526.63

COMPARATIVE STATEMENT.

Date	Receipts.	Expenditures.
June 30, 1885.....	\$1,074,974.35	\$970,277.58
June 30, 1886.....	1,206,167.80	991,829.41
June 30, 1887.....	1,150,046.05	981,644.09
June 30, 1888.....	1,122,994.83	953,730.14
June 30, 1889.....	1,186,557.22	999,697.24

INCREASE IN THE NUMBER OF APPLICATIONS FOR PATENTS, INCLUDING REISSUES, DESIGNS, TRADE-MARKS, AND LABELS.

June 30, 1885.....	35,688
June 30, 1886.....	38,678
June 30, 1887.....	38,408
June 30, 1888.....	37,769
June 30, 1889.....	39,702

NUMBER OF APPLICATIONS AWAITING ACTION ON THE PART OF THE OFFICE.

July 1, 1885.....	5,786
July 1, 1886.....	6,772
July 1, 1887.....	7,601
July 1, 1888.....	7,227
July 1, 1889.....	7,073

From the foregoing it will be seen that the total number of applications received, including designs, reissues, etc., was 42,047; that the number of patents granted was 22,941; that the total receipts were \$1,186,557.22; that the total expenditures were \$999,697.24, leaving a surplus of \$186,859.98 to be turned into the Treasury of the United States to the credit of the patent fund; and making a total balance in the Treasury on account of the patent fund of \$3,524,526.63.

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REPORT OF THE SUPERINTENDENT OF THE YELLOWSTONE NATIONAL PARK.

DEPARTMENT OF THE INTERIOR,
YELLOWSTONE NATIONAL PARK,
OFFICE OF SUPERINTENDENT,
Mammoth Hot Springs, Wyo., June 1, 1889.

SIR: Having been relieved from duty, with my command, in this National Park, I have the honor to submit for your information this report of the operations of the office of the Superintendent of the Yellowstone National Park for the period from August 15, 1888, to the present date.

During the season of travel to the Park, which closed October 31, 1888, probably a larger number of people visited the Park than in any previous year. By a careful estimate from the various hotel-registers, and registers of camping parties, kept at this place and the Lower Geyser Basin, the number was placed at about six thousand.

No disorder of any magnitude occurred during the season, and no complaints of extortion or of unfair treatment, except such as were incident to the crowded condition of the hotels and the insufficient accommodations which they afforded, were received.

On the 19th of August, 1888, a man was arrested by one of my scouting parties near the southern border of the Park, having in his possession the outfit of a hunter and trapper, and to all appearances engaged in trapping beaver. He was brought to this place, and upon examination gave his name as Andrew S. Page, but was identified as a person who was arrested in June, 1887, under suspicious circumstances near the Upper Geyser Basin, and who then gave his name as John Andrews. He at that time made his escape from his captors, leaving his outfit in their possession. He finally admitted that he was the same person. He was then told that if he would produce any evidence of his honesty of purpose, or would find anybody who would vouch for his future good behavior, his property would be restored to him. This he stated he would do, and was permitted to take one of his horses to go in search of the required evidence. He has not since been heard of, and the property which was taken from him still remains in custody at this place.

September 11, 1888, one William Moore, an employé of the Yellowstone Park Association, was expelled from the Park for repeated acts of drunkenness and disorder.

On the 12th of September, 1888, Thomas Garfield was arrested by a scouting party from my command, on Willow Creek, within the Park, in the act of trapping beaver. He had in his possession several green beaver-skins and the freshly-killed carcass of a beaver. He was ex-

pelled from the Park and his outfit held subject to the orders of your Department.

A report of this case was made to the Department September 13, 1888, and instructions asked concerning the disposition of the property seized, to which no reply has been received. This man at the time of his expulsion made threats that he would get even with the Park. It was subsequently ascertained that he came back into the Park during the night of the 14th, and efforts were made to apprehend him, but without success.

On the 17th of the same month the non-commissioned officer of my command, in charge of a detachment stationed at the Norris Geyser Basin, discovered a fire in thick timber about 4 miles from Norris in the direction of Mount Holmes. He, with his detachment, started at once for the scene of the fire, and by hard work succeeded in extinguishing it. He found near the place at which the fire was started the tracks of a man, which, from the character of the imprint, was believed to be Garfield. This belief was confirmed by the arrest of Garfield on the trail leading from Mount Holmes by one of my sergeants stationed at Riverside, on the west side of the Park. He was again put out, and after hanging around the western border of the Park for a few days disappeared, and has not since been heard of.

On the 10th of February Mr. Edward Wilson, scout and guide, accompanied by Corporal William L. Boyce, of my troop, started on a snow-shoe scout through the Park. They were overtaken by stormy weather and a heavy fall of light snow, which made snow-shoe travel very difficult, and after visiting the different geyser basins returned, having been absent ten days.

On the 10th of March the same two men started again to carry out the object of their previous expedition, which was to visit the warm-spring basins on the east side of Yellowstone Lake, for the purpose of ascertaining whether or not they were the winter resorts of the buffalo. These basins, being surrounded by a net-work of fallen timber and swampy ground, are well-nigh unapproachable, except when the ground is frozen and covered with deep snow, so as to make snow-shoe travel possible. The men took with them ten days' rations on their backs, but were absent twenty days. They encountered unexpected difficulties, owing to the soft character of the snow, and some anxiety for their safety was felt after their absence had been prolonged. This expedition was successful in locating the buffalo in their haunts of the previous winter near the hot-spring basins on the divide between the waters of the Yellowstone and Madison Rivers. Although no buffalo were seen east of the Yellowstone, it was evident from the abundant signs that they habitually frequented the hot-spring basins in this locality, some of the signs being quite fresh.

The past winter having been unusually mild, with a light snow-fall, was favorable to the game, which has been seen in all parts of the Park in undiminished numbers. Bands of elk approached within sight from this place several mornings in succession, and a large herd of antelope could be seen from the town of Gardiner during a large portion of the winter. The early disappearance of the snow, consequent upon the light snow-fall of the previous winter, and an early spring, was taken advantage of by the officer in charge of road construction and repair in the Park, and work was begun upon the roads in this vicinity about the middle of March. Working parties were sent into the Park on 15th of April.

Visitors to the Park began to arrive as early as the 1st of May.

The hotels of the Yellowstone Park Association were opened to visitors on the 15th of May, and at this date there is a fair volume of travel to the Park.

FOREST FIRES.

I report with great satisfaction, that although last season was an exceptionally dry one and the conditions all favorable to the spread of forest fires, no destructive fires within the limits of the Park occurred. In this connection great credit is due to Lieut. T. M. Moody, Twenty-second Infantry, and the detachment under his charge, as well as to the enlisted men of Troop M, First Cavalry, for the energy and devotion to duty displayed in their efforts to extinguish and keep under control the many fires which were started by the carelessness of camping parties, and from other causes. Many fires were extinguished which would otherwise have wrought great destruction.

LEASES AND BUSINESS PERMITS.

On the 22d day of March, 1889, the Yellowstone Park Association, having surrendered all rights which it had acquired under a lease which had been granted on the 9th day of March, 1883, to Carroll T. Hobart *et al.*, and by the said lessees assigned to the Yellowstone Park Improvement Company, and which had been sold under a decree of the United States court for the Territory of Wyoming, and by virtue of which sale the Yellowstone Park Association claimed title; and also all rights under a lease granted on the 29th day of January, 1884, to George W. Marshall for a certain piece of land in the Park, and which had been assigned to the Yellowstone Park Association; and the Yellowstone Park Association, by Charles Gibson, its president, and Charles Gibson individually, having delivered up the lease made by the Department to Charles Gibson March 20th, 1886, for certain lands in the Park, and the said lease having been declared canceled, the Department, on the 20th day of March, 1889, granted to the Yellowstone Park Association six leases of ground in the Yellowstone National Park, as follows: At Mammoth Hot Springs, 3 acres; at Norris Geyser Basin, 1 acre; at Lower Geyser Basin, 2 acres; at the Grand Cañon, 2 acres; at Yellowstone Lake, 1 acre, and at the Thumb (so called) of the Yellowstone Lake, or on Shoshone Lake, 1 acre.

The Department also, on the 5th day of April, 1889, granted permission, subject to certain conditions, to the Yellowstone Park Association to place a naphtha launch on the Yellowstone Lake, the said launch to conform to certain specifications.

February 14, 1889, the Secretary of the Interior granted permission to Ole Anderson, subject to certain conditions, to engage in the business within the Park of placing small articles in the waters of the hot springs, to be incrustated with the deposit left by the water, and of selling such coated articles to tourists, the privilege being personal and non-assignable. On the same date the Department granted to Mrs. Jennie Henderson Dewing, postmaster at Mammoth Hot Springs, the privilege of keeping for sale in the post-office at this place photographic views, stationery, etc., the privilege to continue only during Mrs. Dewing's term of office as postmaster.

On the 3d of April, 1889, permission by the Department was granted to the medical officer attached to the military force to practice medicine in the Park, with the understanding that such practice will not conflict with any Army regulations.

TRESPASSERS IN THE PARK.

Attention is invited to remarks under this head contained in my two previous reports. No trespass has occurred since my last report.

HOTEL ACCOMMODATIONS.

On this subject attention is also invited to my report for the year 1888. At the date of this report no improvement has been made in the character of the accommodations provided for visitors.

TRANSPORTATION.

During the rush of travel to the Park in the months of August and September last the transportation facilities provided by the Yellowstone Park Association, through its agent, George W. Wakefield, were inadequate to the requirements of travel. The surrounding country was scoured, and animals and vehicles of every description were brought into requisition. Many visitors were forced to ride through the Park in uncomfortable and unsuitable conveyances, or otherwise to forego the object of their visit. Fortunately no serious accidents occurred. This immunity, when the character of the outfits and drivers employed is considered, may rather be ascribed to good fortune than to any proper precautions on the part of the Yellowstone Park Association or its agents.

ROADS.

There being no appropriation available, no road work was done in the Park during the year 1888, except some very slight repairs in the spring of that year to open the roads for travel. The appropriation for the fiscal year ending June 30, 1889, having finally become available, work was commenced as early as the 18th of March last, and has been vigorously prosecuted to date.

The road from the northern border of the Park to Gibbon Cañon has been put in a perfect state of repair. The approach to the hotel plateau from the Gardiner River has been greatly improved by the construction of a new piece of road about one-half mile in extent. The gap in the existing system of roads, of about 3 miles, between Swan Lake and Indian Creek, has been filled, and a substantial bridge placed across Indian Creek.

Work is now in progress on the new road through the cañon of the Gibbon River, with a prospect of its completion to a point beyond the cañon before the end of the fiscal year. Work is also in progress upon the extension of the road to the Grand Cañon, across Cascade Creek, and down the cañon as far as Lookout Point.

PROTECTION AND GOVERNMENT OF THE PARK.

The legislation by which this National Park was brought into existence was unfortunately defective, in that it failed to provide any effective method for its government or protection.

Section 2 of the act approved March 1, 1872, provides:

That said public park shall be under the exclusive control of the Secretary of the Interior, whose duty it shall be, as soon as practicable, to make and publish such rules and regulations as he may deem necessary or proper for the care and management of the

same. Such regulations shall provide for the preservation from injury or spoliation of all timber, mineral deposits, natural curiosities, or wonders within said Park, and their retention in their natural condition.

The Secretary may in his discretion grant leases for building purposes for terms not exceeding ten years of small parcels of ground at such places in said Park as shall require the erection of buildings for the accommodation of visitors. All of the proceeds of said leases, and all other revenues that may be derived from any source connected with said Park, to be expended under his direction in the management of the same, and the construction of roads and bridle paths therein. He shall provide against the wanton destruction of the fish and game found within said Park, and against their capture or destruction for the purpose of merchandise or profit. He shall also cause all persons trespassing upon the same, after the passage of this act, to be removed therefrom, and generally shall be authorized to take all such measures as shall be necessary or proper to fully carry out the objects and purposes of this act.

The inadequacy of mere rules and regulations, unsupported by any appearance of force or penalties for their infraction, soon become apparent, and there has been hardly a report rendered relating to the Park during the eighteen years of its existence in which the necessity of some further provision of law for its preservation and government has not been urged.

A full account of all the various methods and expedients which have been resorted to since the establishment of the Park in the endeavor to protect it would exceed the limits of this report, but brief allusion to some of them may serve to illustrate the difficulties and uncertainties which have surrounded the subject, and to emphasize the necessity which exists for the adoption of some definite and well-considered scheme of government. In the summer of 1882 the unchecked vandalism of visitors and the destruction wrought by forest fires had reached such a point, that the application of some remedy appeared absolutely necessary, if any portion of the Park was to be preserved, and the Department, in despair, it would seem, of any Congressional action, determined, under the authority contained in the act of dedication, to lease considerable portions of the Park to persons believed to be responsible, in the hope that they would, through self-interest, give it that care and protection which the Government had failed to give. This action of the Department seemed to invite attention to the deplorable condition of the Park, and it may be believed induced more liberal appropriations, thereby permitting the employment of a larger number of assistant superintendents, and at least an attempt at better protection. It was also provided by the act approved March 3, 1883, that—

The Secretary of War, upon the request of the Secretary of the Interior, is hereby authorized and directed to make the necessary details of troops to prevent trespassers or intruders from entering the Park for the purpose of destroying the game or objects of curiosity therein, or for any other purpose prohibited by law, and to remove such persons from the Park if found therein.

Under this authority a troop of cavalry passed a portion of the summer of 1883 in the Park, but it does not appear that it was called upon to engage actively in its protection.

The weakness of a government unprovided with any means for the enforcement of its established rules continuing to be apparent, the legislature of Wyoming, in the winter of 1884, passed "An act to render operative and effectual the laws of the Territory of Wyoming within that portion of the Yellowstone National Park lying within said Territory, and to protect and preserve the timber, game, fish, and natural objects and curiosities of the Park, and to assist in preserving the rights of the United States therein." This act, which was approved March 6,

1884, made the portion of the Park lying within Wyoming Territory a part of Uintah County; provided for voting precincts and for the election of justices of the peace and constables; extended the laws of Wyoming Territory over the portion of the Park within that Territory, and provided that the rules and regulations of the Secretary of the Interior for the government of the Park should have the same force in the Park as the laws of Wyoming Territory. Section 7 of this act provided—

That it shall be unlawful for any person, whether resident or visitor, to deface injure, or remove any part, portion, or particle of the natural curiosities or objects of interest, or anything whatever, within the Yellowstone National Park, whether tree, rock, stone, shrubbery, earth, geyser formation, grass, or anything whatever, except that it may be permissible to use timber or any other thing not objects of curiosity or of interest or adding to the scenic attractions of the said Park, for the necessary purposes of fuel or house-building or any domestic, useful, or necessary purpose not prohibited by the laws of the United States or the rules and regulations of the Secretary of the Interior, and any person so offending shall be guilty of a misdemeanor, and shall, on conviction thereof, be punished by a fine not exceeding \$100 or by imprisonment in the county jail not exceeding six months.

Section 8 provided for the protection of the game of the Park, and fixed pains and penalties. The act further provided that a jail should be established in the Park; that the expenses of all criminal prosecutions and the salaries of the justices of the peace and constables should be paid by the Territory of Wyoming; and that one-half of the fines assessed against offenders under the provisions of the act should be paid to the informers.

Judged by the stringency of its provisions, this act should have afforded to the Park all needed protection, and yet it completely failed in its object. Vexatious arrests were made under the sweeping provisions of section 7 of the act, and it soon became evident that its tendency was to defeat the principal object for which the National Park was established. Instead of a "pleasure ground for the benefit and enjoyment of the people," it seemed likely to become a place where visitors would be subject to arbitrary arrest and serious annoyances for the most ordinary and innocent actions.

The indignation aroused by certain arrests, which appeared to have been made without sufficient cause or justification, together with the uncertainty which existed as to the authority of Wyoming Territory to exercise judicial powers within a national reservation which had been placed by law under the exclusive control of the Secretary of the Interior, caused the repeal of the obnoxious act March 10, 1886.

The repeal of this ill-considered and unwarranted act was a necessity, but as it was the first and only law under which judicial authority had been exercised in the Park, the first effect of its abrogation was to leave the Park in a worse plight than ever before. It became generally known that the superintendents had no support beyond the rules and regulations of the Department and their own personal force, and as a result the rules and regulations were ignored, while outlaws and vagabonds from the surrounding region made the nation's pleasure ground a place of refuge. The hotels were frequented by gamblers and adventurers who preyed upon the unwary tourist, while forest fires, originating mysteriously in remote and inaccessible places, raged unchecked. During the summer of 1885 a committee of Congress visited the Park for the purpose of inquiring "into the expenditure of public money for the Yellowstone Park and the administration of the laws applicable to said Park, whether any change should be made in said laws or the boundary of the Park, and what steps, if any, can be taken to make of practical benefit and utility that portion of the public domain."

This committee remained in the Park five days and took a quantity of testimony bearing upon the subject of inquiry.

The Park was at this time under the government provided by the Wyoming statute. The following extracts, taken from the majority report of this committee, signed by two members who visited the Park and one absent member, are of special interest in connection with this subject:

The magnificent mountain scenery of this Park, as well as the wonderful display of the forces of nature in foaming fountains, boiling lakes, marvelous and awe-inspiring geysers, great mountain sheets of water, and the great falls of the Yellowstone seem to have fully justified the policy of setting apart this marvelous region as a national park.

Hotels are established, or are being established, in the vicinity of each of the most interesting objects, and the persons to whom special privileges have been given for this purpose have a special object in protecting them from wanton injury by inconsiderate travelers and curious tourists, even if such protection was necessary.

None of these natural curiosities, however, are of a nature which exposes them to material injury; and if they were so exposed to deterioration and injury, a much larger force than has ever been contemplated would be necessary to protect them, as they are not only numerous, but scattered over a vast extent of country.

Nor is the police force, superintendent, and assistants, eleven in all, of special value for this purpose. A favorite purpose has been the protection of the wild animals—buffalo, elk, deer, bear, etc.—of the Park, animals which are so rapidly disappearing from all parts of the Great West. But in so extended a mountain region it is scarcely possible, even with every reasonable precaution, that these animals can be protected from the cupidity of the hunter and the wanton and more than savage barbarism that has exterminated the herds of buffalo that a few years ago pastured in countless numbers on the great prairies. It will be seen from the testimony in the appendix how improbable it is that any of these animals will for any considerable period remain, even in imagination, an interesting feature of this Park.

But on the subject of "utility," mentioned in the provision of law under which this committee was appointed, connected with the real interests of the Park for the enjoyment of all the people of the United States, the preservation of the forests, which clothe with verdure the valleys, rugged declivities, and mountain peaks of the whole region, are of special moment.

These magnificent forests, while adding beauty to the rugged grandeur of these mountain ranges, are of the highest value to extended regions of country.

In the Park are found the sources of the great rivers west of the Mississippi—the Yellowstone, and Snake Rivers; the one, traversing an immense region of fertile land, swells the waters of the Missouri, while the other is a main branch of the Columbia.

It is made very clear by the practical and scientific views presented of this subject in the testimony already presented that the regular flow of water in these rivers is greatly dependent on these forests. These mountain regions are of no value for agriculture, while their wealth of forests is of the highest economic value, besides the beneficent influence they probably exert over the rain-fall, temperature, and climate of a vast region of country.

The irrigation of the magnificent valleys of the Yellowstone is believed greatly to depend on the gradual and regular flow of water in that beautiful river, greatly dependent on these protecting forests. It is believed that the rapid flow of water from these mountain regions, from barren range of peaks and declivities, would produce wide-spread disaster in valleys even remote from the mountains.

It is therefore, in the judgment of the committee, of the highest moment that these forests should be protected from destruction either by fire or the axe. To this extent, having in view at once the beauty of the Park as a delightful resort for the people and the value of the great streams of water that issue from the mountains, as well as the benign influence of the forests on climate and health, this Park should receive the special care of the Government.

The committee further submit, for reasons above named, that the region of country to the width of 30 miles on the east side of the Park and 8 miles on the south—a mountainous region of the same general character with the Park, barren ranges covered with forest—should be reserved forever from sale and the forests protected from destruction.

Beyond the dedication of this "tract of land" as a "public park or pleasure ground for the benefit and enjoyment of the people," and placing the same under the control of the Secretary of the Interior and appropriating of late years \$40,000 a year for the improvement of its roads and providing a police force for its protection, Congress up to this time has done nothing in relation to the Park; and yet, except in extortionate charges of those permitted to build hotels and carry on business in the Park

for the public convenience, there is no cause for complaint. The roads now reach every object of special interest. The Park should, as far as possible, be spared the vandalism of improvement. Its great and only charms are in the display of the wonderful forces of nature, the ever-varying beauty of the rugged landscape, and the sublimity of the scenery. Art can not embellish these.

The sum of money heretofore of late years annually appropriated of \$40,000 is more than ample to continue the construction of roads, the salaries of the police force, and contingencies, but the appropriations to each purpose should be specific. In the opinion of the committee the only important duty of a police force—superintendent and assistants—in the Park is to protect the forests from fire and ax.

This report recommended—

That the boundary line dividing Montana and Wyoming on the north of Wyoming be changed so that the strip of land on the north end of the Park now in Montana shall be made a part of Wyoming, and that the western line of the Park be the western line of Wyoming as now established, and that the strip of land 8 miles wide immediately south of the Park and the strip of land immediately on the east side of the Park to the width of 30 miles be reserved from sale, and a stringent law enacted against the destruction of the forests thereon.

A report of the minority of this committee, signed by two members who visited the Park, states as follows:

While agreeing generally in the conclusions of the committee as to the Yellowstone Park, we do not agree that sufficient roads have been constructed in the Park. On the contrary, new roads should be constructed to many places of interest in the Park, and much of the road built at an early day, and not under the direction of an engineer officer of the Army, needs to be relocated and reconstructed; and while we agree that the most important duty of the superintendent and assistants in the Park "is to protect the forests from fire and the ax," yet we are of opinion that it is important to protect the objects of interest from injury, especially at the hands of the relic hunter and the professional collector of specimens, and the game from injury or destruction.

It may be presumed that the failure of Congress to make any appropriation for payment of the salaries of the superintendent of the Park and his assistants for the fiscal year ending June 30, 1887, was due to the influence of this report. The effect of this failure was to abolish these offices, and the only method remaining for the protection of the Park was that provided by the act of March 3, 1883. Under this authority a troop of cavalry, under my command, was ordered into the Park, arriving at this place August 17, 1886.

All of the circumstances connected with my administration of affairs in the Park having been previously reported, it will suffice to state here that the general method of Park government pursued since the date above mentioned has been that of a military reservation, re-enforced and guided by the rules and regulations established by your Department and the authority of the statute law.

During the first year recourse was had with considerable frequency to the authority which permits offenders to be removed from the Park, but since it has become known that the National Park can not be made a resort for vagabonds and outcasts and that any serious or intentional violation of the established rules is quite certain to result in arrest and expulsion, with possible pecuniary loss, comparatively little difficulty has been experienced. The penalties for violation of the rules not being severe, it has been considered important to make it generally understood that they could not be violated without reasonable certainty that detection with some punishment, or at least inconvenience, would follow. By a liberal distribution and posting of the published rules and regulations and by timely admonition and warning it has been the endeavor to prevent the commission of offenses rather than to seek opportunities to inflict penalties.

The people residing in the vicinity of the Park have seen that their interest lies in supporting the authorities and in encouraging an observ-

ance of the reasonable and just regulations which have been established.

Hunters and trappers have not been permitted to operate within the limits of the Park, and the game animals under the protection afforded have visibly increased and multiplied. Good order, peace, and quietness have generally prevailed. Life and property has been secure, and many thousands of visitors from every part of the civilized globe have been permitted to enjoy the wonders of nature undisturbed by fears of molestation or uncalled for espionage.

These statements as to the satisfactory condition of the Park with respect to law and order are not made for the purpose of vaunting the superiority of present methods of government and protection over all others, but to show that by the use of an organized and disciplined force, respect for the established rules and regulations and the rights of life and property can be maintained. And it is believed that to the extent in which the present method of government and protection is an improvement upon former methods it is due to the visible power and force of the National Government as represented by the military garrison in the Park.

It is not to be inferred that the claim is made that a military government is the only one practicable for the Park, or even that it is the best adapted or most suitable. It is believed, however, that no efficient protection can be given to the Park without the support of a well-organized and disciplined police force of some description.

In my report to your Department for the year 1886 I recommended the following appropriations for the protection of the Park :

For pay of one superintendent.....	\$3,000
For pay of one chief game-keeper.....	1,200
For pay of ten assistant game-keepers.....	9,000
For pay of one chief of police.....	1,200
For pay of twenty policemen.....	18,000
For pay of one clerk.....	900
Total.....	33,300

I am now of the opinion that on account of the extension of the system of roads and the increase of summer travel the number of policemen should be increased to thirty, thus making the total to be paid for salaries \$42,300. The equipment of this force would probably cost \$6,500 additional, making the cost of protection, not counting the subsistence of necessary animals, \$48,800.

In view of previous appropriations made for this purpose this estimate may appear somewhat excessive, and yet from my acquaintance with the subject I am convinced that any attempt to accomplish the object sought with a less force of civilians or with decreased salaries must result in failure. This sum would also appear moderate when compared with the annual amount expended in the support of the military force which now performs the duty of protection in the Park.

The present status of this subject with reference to the employment of a military force for the protection of the Park is in a very unsatisfactory condition. The uncertainty which surrounds it may be presumed to preclude the establishment of a military post in the Park of sufficient capacity for a garrison large enough to perform the duties of Park protection well and efficiently without risking any impairment of military efficiency in the force so employed, and necessitates the employment of temporary and less-effective means with a maximum of discomfort to the troops so employed.

The officer in command of the troop has during the past three years performed, in addition to the duties of his position, those civil duties which pertain to the office of the superintendent of the Yellowstone National Park without compensation other than such recognition of his services as has been accorded by your Department. In alluding to this subject there is no intention of complaining. The duties to which reference has been made have been cheerfully and willingly performed, as they will doubtless be by other officers of the Army under like circumstances. But it is an exceedingly anomalous condition of affairs which ought not to prevail indefinitely and as a matter of course.

The time would seem to be fully ripe for a definite settlement of the question as to the means to be employed in the protection and government of the National Park, and as my connection with the Park ceases with the rendition of this report, I deem it a suitable time to urgently invite your attention to the importance of this subject.

The annoyance experienced by the hunting operations of bands of Bannock Indians from the Fort Hall and Lemhi Agencies in Idaho has been the subject of frequent communications to the Department of the Interior during the past two years. In the month of January last copies of certain reports rendered by Peter Gallagher, Indian agent at the Fort Hall Agency, and J. M. Needham, of the Lemhi Agency, to the honorable Commissioner of Indian Affairs, having been furnished me for my information, and in the reports a general denial that the Indians referred to had hunted in the vicinity of the Park having been made, I, on the 12th of February last, submitted to the Department a report on the subject supported by a number of affidavits. The receipt of this report not having been at this date acknowledged, and as the subject appears to be of sufficient importance to require your attention, I append it to this report, marked A.

In my experience in connection with this National Park I have been very forcibly impressed with the danger to which it is subjected by the greed of private enterprise. All local influence centers in schemes whereby the Park can be used for pecuniary advantage. In the unsurpassed grandeur of its natural condition it is the pride and glory of the nation; but if under the guise of improvement selfish interests are permitted to make merchandise of its wonders and beauties it will inevitably become a by-word and a reproach.

In the last two annual reports which I have submitted to your Department I have had great pleasure in acknowledging the services rendered in the protection of this National Park by Mr. Edward Wilson, the scout and guide employed at this station under the authority of the War Department. In taking leave of the National Park I deem it my duty to again bear witness to his faithful, zealous, and courageous performance of the difficult duties with which he has been charged.

I have this day transferred to Capt. F. A. Bontelle, First Cavalry, the records of the office of the superintendent of the Yellowstone Park, the public property pertaining to the Department of the Interior for which I am accountable, and certain property which has been taken from persons violating rule 5 of the Rules and Regulations of the Yellowstone National Park, together with your instructions of the 24th ultimo for the disposition of the same which were received yesterday.

I am, sir, very respectfully, your obedient servant,

MOSES HARRIS,
Captain First Cavalry.

The SECRETARY OF THE INTERIOR,
Washington, D. C.

SUPPLEMENTAL REPORT OF THE SUPERINTENDENT OF
THE YELLOWSTONE NATIONAL PARK.

The Hon. SECRETARY OF THE INTERIOR,
Washington, D. C.:

Having assumed the duties of Superintendent of the Yellowstone National Park only one month ago, my report for a part of the fiscal year ending June 30, 1889, will naturally be very brief.

I have been favored by Capt. Moses Harris, First Cavalry, my predecessor, with a perusal of his report closing his administration of affairs of the Park May 31, 1889. It will be found very comprehensive and interesting. His management has left matters in the Park in so healthy a condition that little trouble is apprehended in its government.

I have not had an opportunity for making a thorough inspection of the Park, but while making a tour with Senators Hoar, Allison, Hale, Pugh, and Dolph I was impressed with the danger that exists of its utter ruin as a Park by forest fires. There is no equipment for fighting fires, and I am sure that without proper appliances a fire well under way in any part of the Park would be uncontrollable, and, besides destroying its beauty, would be of incalculable injury to the countries receiving their water supply from this great reservoir.

A great deal of damage has already been done to the Park by fires, but there are still thousands of acres of dense, low-grade pine timber which protects the snow from the sun's rays, and retards the melting until late in the season. A rapid melting of the snows of this region would certainly be attended by freshets on both sides of the continental divide. The unruly character of Snake and Missouri Rivers in high water are too well known to deserve comment.

If this wonderland is considered worth preservation a liberal appropriation should at once be made to be used in clearing away the down timber for 100 yards on each side of the roads and trails. Many parties pass through the Park camping, and many of the fires which occur are traced to them. I do not believe they are, as a rule, willfully careless, but they often leave their fires believing them out, when in fact they are not, and the winds soon fan the embers into flames. It may become necessary to establish regular camping grounds, at intervals of a few miles, when the camps can be examined every morning by persons charged with the duty, and all remaining fires extinguished. As fires often occur at a distance from water, there should be supplied two or more water wagons, drawn by four mules, a number of folding rubber buckets, axes, and shovels. The rubber buckets could be carried on horses. The tanks could be filled at the nearest streams and hauled to the fires. It very often happens that fires get into the dead roots of trees, where they can not be reached by shovels and axes, and such fires have to be watched for days, or until they are burned out, while a few buckets of water would put them out at once.

Except at the Mammoth Hot Springs there are no suitable hotels in the Park. I believe the Yellowstone Park Association intend erecting good buildings as fast as possible. The work on their buildings has been greatly impeded by the regulations prohibiting the cutting of live timber in the Park. Your recently received authority for the cutting of the necessary timber for the erection of hotels will greatly facilitate matters.

The Park is so far from the supply of both labor and material that the work is slow. The breaking of a single piece of the saw-mill, for instance, or the sickness or incapacity of a workman brought out from St. Paul, will stop the work until they can be replaced.

The hotel at the Grand Cañon will be completed this season, and the one at the lake is so far under way that mechanics can work on it this winter and have it ready for next season.

That portion of the statute which prescribes that no hotel shall be erected within 440 yards of any object of interest is very embarrassing, and I think should be modified to read 220 yards. A special case in point is the hotel at Upper Geyser Basin; it is about 250 yards from "Old Faithful" geyser and is situated on the only good site for a hotel building in that basin. From its porch every active geyser in the basin can be seen. To enforce the 440-yards proviso would be to push the hotel back out of sight of many.

The work on the roads through the Park is being pushed vigorously by the engineer corps under the immediate direction of Lieut. William P. Craighill, Engineer Corps, and by the close of the season travel will be greatly improved.

There is much down timber on the trails. This, with promised assistance from the engineer party, I hope to have removed very soon.

The game seen in the Park appears so remarkably tame that I believe with time many varieties will become so gentle that they will have little greater fear of man than the animals seen in eastern parks.

With a small appropriation I believe an inclosure on the roadside could be made and stocked with elk and deer and antelope, so as to be seen by all tourists passing. The only expense attending their support would be a little hay for winter.

From what I can learn, the Park until recent years was considered by many living in the neighborhood little else than a fine hunting-ground. I think most of those who were in the habit of hunting in the Park have now a feeling of proprietary interest and recognize that the protection afforded the game makes it a safe breeding-ground, and that there will be more game in the adjacent country if the animals while in the Park are not disturbed.

The carnivora of the Park have, in common with other animals, increased until, I believe, something should be done for their extermination. This will be made the subject of a special letter. If the proposition is favorably considered the work should be done by persons under my control.

In passing through the Park I noticed with surprise the barrenness of most of the water of the Park. Besides the beautiful Shoshone and other smaller lakes there are hundreds of miles of as fine streams as any in existence without a fish of any kind. I have written Col. Marshall McDonald, U. S. Fish Commission, upon the subject, and have received letters from him manifesting a great interest. I hope through him to see all of these waters so stocked that the pleasure-seeker in the Park can enjoy fine fishing within a few rods of any hotel or camp. There are other reasons, too, to be considered in this connection. The stocking of these waters will add vastly to the breeding-grounds of the tributaries of the Missouri and Snake Rivers and add immeasurably to the food supply obtained from those waters.

The attention of the Secretary is earnestly asked to the fact that the boundary of the Park is not marked, and only known by the description contained in the statute. I believe persons have hunted and

trapped within the Park, and may again do so, through ignorance of its boundaries. A survey, a small slashing through the timber, and the piling of a few rocks in the open country is all that is necessary, and should cost very little.

If the guarding of the Park is to remain a military duty it should be settled by law as soon as possible and this station recognized as a military post. It is now considered a cantonment and the troops in cantonment. The temporary buildings are insufficient and not as comfortable as at other posts. Estimates for additional quarters are disapproved upon the grounds that the station of troops in the Park is temporary.

A suitable residence for the Superintendent is necessary, and if an appropriation could be obtained for such a building it would greatly relieve the pressure now felt by officers on duty in the Park.

The most embarrassing features of Park administration appear to be the want of any law except such as is vested in the Secretary of the Interior in establishing rules and regulations.

So far as the Superintendent is concerned he can make no distinction between the offense of breaking a small piece off a formation or breaking a tourist's head, carrying away a bit of incrustation or carrying away a tourist's trunk. I know little of civil law, and have no remedy to propose. I only suggest that something should be done, leaving the system to others of experience.

I have reasons to believe that schemes are on foot looking to the cutting off of a portion of the northeastern corner of the Park. If the preservation of the game of the Park is worthy of consideration this should be strongly opposed, as some of the principal winter ranges of elk and buffalo are in the part proposed to be cut off.

Inclosed herewith is a meteorological record of the post, kept at the post hospital; also an estimate of the cost of care and preservation of the Park under civil administration for fiscal year ending June 30, 1891. It will appear large, but I am confident a lesser number of employés can not, with the probable increase of travel, perform the duties to your satisfaction.

F. A. BOUTELLE,
Captain, First Cavalry,
Acting Superintendent Yellowstone National Park.

REPORT OF THE SUPERINTENDENT OF THE HOT SPRINGS RESERVATION.

HOT SPRINGS RESERVATION,
OFFICE OF THE SUPERINTENDENT,
Hot Springs, Ark., August 14, 1889.

SIR: In obedience to the instructions contained in your letter of July 19, 1889, I have the honor to submit the following report of the operations of this office for the fiscal year ending June 30, 1889.

As I took charge of this office and entered upon my duties here on June 19, 1889, my incumbency covers but a small portion of the fiscal year and the operations of this office to be embraced in this report. All of the receipts, expenditures, and operations of the office for said year were under the administration of my predecessor.

This reservation, although originally containing four entire sections and, nominally, 2 miles square by sectional numbers, contains but 2,529.10 acres. The Hot Springs Commissioners, appointed under the acts of Congress approved March 3, 1877, and December 16, 1878, subdivided the original "Hot Springs Reservation" as follows:

	Acres.
Hot Springs Mountain	264.93
North Mountain	224.74
Sugar Loaf Mountain	129.02
West Mountain	281.94
City lots	1,270.10
Area of streets and alleys	358.37
Total area	2,529.10

The four mountains mentioned above, containing an area of 900.63 acres, constitute the "permanent reservation," and are "forever reserved from sale and dedicated to public use as parks." (Act of Congress approved June 16, 1880, sec. 3.)

The following table shows the number of city lots laid out by the Hot Springs Commissioners, the number awarded to individuals, the number sold and donated, and the number unsold and now under the care of this office, viz:

Total number of lots laid out	2,019
Awarded to individuals	1,435
	584
Sold and donated	258
Unsold	326

The foregoing shows that the lands belonging to the Government and under the immediate care of this office are embraced in four separate tracts, aggregating 900.63 acres, and 326 city lots situated in different portions of the city. The "permanent reservation" covers the four mountains already mentioned. This is subdivided into four separate and detached tracts with exterior or boundary lines aggregating about 11 miles. These mountains are largely covered with trees, and are rocky, rugged, and precipitous. There is not a road or bridle way over and across them. They are surrounded by lands belonging to individuals and a population estimated at from 10,000 to 12,000. Under these conditions I am instructed that "especial care should be taken to guard against the cutting or removal of trees and shrubs, sod, earth, or rocks, or anything belonging to the reservation, unless such removal is for the purpose of beautifying the reservation or increasing the usefulness of the same, and then only under the specific direction of the superintendent." These duties are being performed as well and fully as the limited means and help at my command will permit. The side walls and arch of rubble masonry erected by the Government over Hot Springs Creek are in good condition, and the culvert is answering the purposes for which it was designed.

There are thirteen persons and copartnerships owning bath-houses or bath-house sites or claims on the permanent reservation who paid water rent for the year just closed. The names of these houses, sites, or claims, the number of tubs paid on and the monthly receipts from each are as follows:

Name.	Tubs.	Amount.
New Rector.....	26	\$65.00
Little Rector.....	5	12.50
Big Iron.....	40	100.00
Superior.....	16	40.00
Old Hale.....	21	52.50
Unnamed (leased site).....	20	50.00
Independent.....	21	52.50
Palace.....	23	57.50
Horse Shoe.....	30	75.00
Magnesia.....	30	75.00
Ozark.....	22	55.00
Rammelsberg.....	18	45.00
Lamar.....	40	100.00
Total.....	312	780.00

The "Little Rector" is purely mythical. No house, no tubs, no water : but the "water rent" is paid each month in advance. The "Unnamed," leased site, is unoccupied and has no existence whatever except an unexpired lease, a brief history of which was submitted to you in my letter of July 24, 1889. The "water rent" on this site—20 tubs, \$50—is paid monthly in advance.

There are, including the 25 imaginary tubs, 312 tubs in the bath-houses, leased sites, and claims on the permanent reservation paying water rent—monthly, \$780; annually, \$9,360.

There are six persons or copartnerships owning bath-houses or claims off the reservation who paid water rent for the last fiscal year, as follows:

Name.	Tubs.	Amount.
Avenue.....	20	\$50.00
Rockafellow.....	20	50.00
Grand Central.....	11	27.50
Hot Springs.....	12	30.00
French.....	4	10.00
Sumpter.....	4	10.00
Total.....	71	177.50

The "French" is not in existence, having been destroyed by fire some two or three years ago. The "Sumpter" is a hotel without tubs. The "water rent" on each is paid monthly in advance. Including these two, there are six houses off the reservation paying a water rent on 71 tubs of \$177.50 per month or \$2,130 per annum.

The Arlington Hotel is on the permanent reservation and pays an annual rental of \$1,000, which is paid quarterly in advance.

I am unable to report the exact amount of expenditures for the year. My predecessor reserved that data from the files of this office when he retired. But from the monthly statements sent to this office during the year by the depository of public funds at Little Rock, Ark., I have been enabled to submit a close approximate. This gives total expenditures for the year, \$6,368.90.

The account, receipts and expenditures, may be stated as follows:

Receipts—		
Water rent.....		\$11,490.00
Ground rent.....		1,000.00
		12,490.00
Expenditures:		
Salaries, expense, repairs, improvements, etc.....		6,368.90
Balance.....		6,121.10

This shows a net income to the Government on account of the Hot Springs Reservation of \$6,121.10 for the fiscal year.

The free bath-house is an institution set apart by Congress, where the afflicted poor may come and take the baths without price or hindrance. "The superintendent shall provide and maintain a sufficient number of free baths for the use of the indigent." (Act of Congress approved December 16, 1878.) Under these conditions we furnish about 450 free baths each day, except Sundays. This aggregates about 12,000 per month, and 72,000 per year. It is with much inconvenience and crowding that this number can be accommodated with the present capacity of the house and pools; and the number of the afflicted poor seeking free baths is constantly increasing. The attention of the Department has been called to the dilapidated condition of the free bath-house building in three of the annual reports submitted by my predecessor. In his annual report for the fiscal year ending June 30, 1887, he said:

The pools are so small (9 feet square) that sometimes standing room is not to be had in them. The building itself is a piece of patchwork, of rude construction, thrown together at different periods, the women's side being contracted, but fairly comfortable otherwise, whilst the part set aside for men is a small, flimsy shanty, uninhabitable in severe weather. Its entire appearance and reality is stunted, mean, and shabby; not in accord with the benevolent designs of the Department, and unworthy to be owned by this great Government.

What more need be said now?

In this connection, I may be permitted to call attention to the fact that, in relation to the free bath-house, the law imposes the duty directly upon the superintendent to "provide and maintain a sufficient number of free baths for the use of the indigent," but has left that officer wholly powerless to do anything without the sanction of the Secretary of the Interior.

Something ought to be done to improve and enlarge the free bath-house and bathing pools. Congress, by act approved October 2, 1888, appropriated the sum of \$5,000 for that purpose, but, with the exception of preparing and submitting to the Department plans, etc., for the improvements contemplated by Congress, nothing has been done. I recommend that this subject receive early attention.

By act of Congress approved October 2, 1888, the sum of \$31,000 was appropriated "for providing a system of reservoirs, pumps, and piping, and for other purposes necessary to the collection and economical distribution of the hot water." This is a much needed improvement. Some surveys in relation to this work have been made, but beyond that nothing has been done, so far as I am informed. The present supply of hot water is barely sufficient for the demands of the bath-houses now in operation. There is an abundance here, but more than one-half of it runs to waste. I greatly fear that the increased demand for hot water consequent upon the completion of the commodious bath-houses now under construction, which it is expected will be open to the public on or before January 1, 1890, can not be supplied under the present system of collection and distribution. It appears to be almost certain that unless some important changes and improvements be made within the next few months, the Government will find itself under obligations to furnish more hot water than it can control and distribute under the present system. I therefore respectfully call special attention to this subject.

On the west front of the Hot Springs Mountain reservation, between the Arlington Hotel and Reserve avenue and the bath-house building line and Central avenue, there is a plot of ground about 1,400 feet long

and averaging some 60 or 70 feet wide—being an area of about two acres—that was set in lawn-grass and young shade-trees last fall and winter by my predecessor. This is a level plat, bounded on the east by bath-houses and on the west by Central avenue, the principal street and thoroughfare of this city. The culvert over the creek is beneath it the entire length, having been filled in and leveled after the completion of the, masonry work over the creek. It is admirably located for a small park, in fact, it is the only piece of ground in “the valley” owned by the Government that is at all suited for such a purpose. The young trees—about 300 in number—transplanted and the grass seeded last fall and winter, are doing fairly well, owing to seasonable rains to this date. But as considerable of the area is immediately over the arched creek, the arch being covered with earth to the depth of 2 or 3 feet, and all of the filling being principally of clay and gravel from excavations near by, there is, in my opinion, great danger of losing the lawn and very many if not all of the young shade-trees when the dry, hot weather of the summer and fall comes on, unless some provision is made for water and for liberal sprinkling during the hot, dry season. I am impressed with the importance of preserving and maintaining this small park. But without a supply of water for the purposes indicated, the work and money already expended on the grounds mentioned will be almost if not entirely lost, and the Government will own a barren, dusty plat of ground along the principal street of this city where there ought to be a green, shady, and attractive park, a convenient place for out-of-door rest for the invalids who come here for treatment. I trust that this subject will receive early and favorable consideration.

I desire to invite your attention to the concurrent opinions and recommendations in relation to certain improvements as held and expressed by a continuous line of officials who have been assigned to duty here since the Government took charge of this reservation. Under the act of Congress, approved March 3, 1877, “Hot Springs Mountain” was set apart as the “permanent reservation.” But the Hot Springs Commissioners, appointed under said act, after looking over the grounds and becoming familiar with the surroundings, in their final report said:

The Commission also recommend a reservation by Congress from sale of all the land included in the blocks covering the mountains. These lands are not needed for any purpose but as public grounds or parks, covered by shade-trees.

The chief engineer appointed by said Commission, in his final report, said:

The lines shown in the general plan upon the mountain blocks are simply designed to suggest the location of possible carriage roads, which may be constructed for drives at some future day.

Acting upon these recommendations, and in furtherance of the plans suggested, Congress, by act approved June 16, 1880, made the following reservation:

SEC. 3. That those divisions of the Hot Springs Reservation, known as the mountainous districts, not divided by streets on the maps made by the Commissioners, but known and defined on the map and in the report of the Commissioners as North Mountain, West Mountain, and Sugar Loaf Mountain, be, and the same are hereby, forever reserved from sale and dedicated to public use as parks, to be known, with Hot Springs Mountain, as the permanent reservation.

Mr. B. F. Kelly, the first superintendent of this reservation, in a letter to the Department, dated November, 1877, asked for a civil engineer “to lay off the mountain in drives and walks,” and said:

Hot Springs Mountain is susceptible of being made one of the most beautiful and attractive parks in the country.

The following extract is from the report submitted to the Department, under date of October 31, 1882, by Mr. Alonzo Bell, late Assistant Secretary of the Interior, who visited Hot Springs in that year on official business in connection with this reservation:

The reservation of the West and North Mountains, thereby securing from spoliation the fine timber which covers them, was a public blessing, and will add materially to the future beauty and comfort of the place. The time will doubtless come when these mountains will be laid out into beautiful parks, with pathskirting their shady sides, and conveniently arranged outlooks on their summits, from which the visitor can enjoy the wild, magnificent scenery of the surrounding country. The reservation of these springs by the United States carries with it certain responsibilities which can not be ignored, and which no spirit of false economy should evade. The money value of these springs is beyond estimate; their therapeutic value can not be described in dollars and cents; they belong to those inestimable gifts of nature, freely bestowed, without price, yet priceless; a boon to suffering humanity that should never be restricted or monopolized by any combination of individuals. The design of the Government in retaining in itself control of these waters was to afford to the greatest number the greatest possible good, and by wise regulations prevent the possibility of extortion. The springs were to be the property of the States, the common heritage of all the people, free from local management, prejudice, or sectional control. They were to be purely national in their character, within the reach of all. * * * The trust reposed by the people in the United States is a sacred one. It can not be wholly discharged by simply supervising the flow of the waters. The higher obligation rests upon it to fully develop the possibilities of the springs, by exhaustive scientific investigation, and by carefully attending to the sanitary requirements of the reservation and its surroundings. Under the fostering care of the United States, Hot Springs should become the great national sanitarium of the continent, its health-giving waters attracting invalids from all parts of the world, and its natural scenery, beautified by art, inviting thousands to it, as a resort where health and pleasure may be found in a pure atmosphere and agreeable climate.

Superintendents Hamblen and Field urged the improvement of that portion of the reservation dedicated to public use as parks. Superintendent Field, in his annual report for the fiscal year ended June 30, 1885, aptly said:

Having faith in the remarkable curative properties of the springs, and since the Government holds them in trust for the public good, with an implied obligation to extend their benefits as much as possible, I think the place should be made attractive, so that the afflicted may be induced to come, and so prolong their stay as to reap the full benefit of the waters. As a means to this end, I recommend that a sum of money be appropriated for the ornamentation of Hot Springs Mountain; at least that walks and seats be provided along its western slope, near the sources of the springs, so that invalids can have some retired and picturesque spot for exercise and rest. Though naturally beautiful, and susceptible of being made a charming resort, it is a wilderness, unfrequented except by an occasional tramp.

The foregoing opinions, arguments, and facts are presented in behalf of my earnest plea for an appropriation to improve and beautify a portion of the permanent reservation, by clearing the underbrush and laying out and building walks and drives about the mountains. It is a noteworthy fact that those who have been on the ground and made personal investigations concur in the recommendation that these improvements be made.

Many thousands of people visit this marvelous valley each year, and the number is constantly increasing as the years come and go. Each of the numerous wonderful cures adds additional fame to the mystic powers given to these waters by agencies unknown to man. The effect is known and felt by thousands, but science and learning have so far failed to discover or report the cause. They are truly one of nature's gracious blessings to man. The location of the Hot Springs here in this narrow, rugged valley, surrounded by lofty spurs of the Ozark Mountain, may be puzzling to man, but the inscrutable and beneficent purposes of the Creator will become manifest at the appointed time. These springs are no longer of local concern and reputation. Their name and fame have

become national and world-wide. The afflicted from the lakes and the seas and from sunny climes and distant shores come here to be made whole, and are not disappointed. Capital and skill from many States have been attracted here to provide for the comfort and necessities of the thousands of visitors. Private capital and enterprise have done and are doing much in that direction. Spacious and well-appointed hotels and bath-houses are being erected. Indeed, this city seems to have been born again.

It would, then, appear proper and seasonable for the Government to keep pace with this grand onward march. Congress has reserved the four mountains overlooking this "valley of vapors" from sale, and dedicated them to public use as parks, where the visitor may have quiet and rest and invigorating atmosphere and enjoy scenery that is charming, sublime, and beautiful. Private capital is doing much more in this direction than the Government. But it is hoped that the Government will at least keep pace with private enterprise.

I therefore respectfully and earnestly recommend that an appropriation of not less than \$10,000 be made by Congress, to be expended in clearing the underbrush and otherwise beautifying Hot Springs Mountain and in laying out and building walks and drives around and over the mountains constituting the permanent reservation.

I am, sir, very respectfully, your obedient servant,

FRANK M. THOMPSON,
Superintendent.

The SECRETARY OF THE INTERIOR,
Washington, D. C.

REPORT OF THE ARCHITECT OF THE UNITED STATES CAPITOL.

OFFICE OF ARCHITECT UNITED STATES CAPITOL,
Washington, D. C., July 1, 1889.

SIR: As relates to the progress made, during the last fiscal year, on the various works under the control of this office, I have the honor to submit the following:

THE CAPITOL.

In addition to keeping the building in good repair, there have been various improvements made thereto.

The steam-heating has been extended to the committee-rooms and Senate library, in the attic story, of the old portion of the building.

New steam-boilers have been placed in the vaults of the House of Representatives.

The Senate boilers have been in use all last winter, and have afforded an increase of power, with a perceptible saving of fuel. The House boilers have not yet been used.

Drinking-fountains have been placed in the connecting corridors of each wing of the building, at a cost of \$1,202.37, leaving \$297.63 on hand of the amount appropriated for the purpose.

The pictures in the Rotunda have been protected by strong brass railings, at a cost of \$390, leaving an unexpended balance of \$110 on account of that work.

The construction of a tunnel, for use with a power elevator, for the House wing is well under way.

The heating apparatus of both wings have worked satisfactorily during the last session. The temperature of the House has never been higher than 71 degrees or lower than 69 degrees, Fahrenheit, any day during the winter months. This equality of temperature, considering the fluctuation of the number of persons visiting the galleries, is remarkable.

The Sawyer-Man Electric Company have used the electric-lighting plant in the Senate wing to the satisfaction of all, so far as the lights are concerned, but as the system used is considered objectionable, the plant has not been accepted, and, in consequence, no payment on account of the same has been made.

As the whole subject of electric lighting of the House wing has been referred to the Committee on Public Buildings and Grounds, nothing further will be done in extending the present plant until further authority is given by Congress.

It is supposed that a satisfactory arrangement can be made with the Electric Lighting Company to permit the use of the present apparatus next session, or until such time as Congress may make some definite arrangement for this lighting.

CAPITOL TERRACES.

The marble and granite works of the terraces and stair-ways are nearly completed; and it is expected that some of the interior rooms will be ready for occupancy during the next session of Congress.

The importance given to the western front of the Capitol by the construction of this terrace seems to require that the central portion of the building be extended and remodeled, which, when done, should be constructed of marble, as are the porticoes of the wings.

Plans have been made for this proposed improvement.

CAPITOL GROUNDS.

Of these grounds, Mr. Frederick Law Olmsted, landscape architect reports:

The lower parts of the terrace of the Capitol having been completed, the grading and finishing of the slopes in connection with them have been continued, and plantations have been made along the base of the structure. The thinning and re-adjustment of other plantations have continued as the expansion by growth of the earlier planted trees and shrubs has given occasion.

The plantations have, with the exception of a few trees, been very healthy, and their rate of growth continues to be remarkable.

The proposed construction of the ventilating and air duct, on the Senate side of the Capitol, will require the removal of a considerable amount of earth, which I recommend to be disposed of in such manner as to provide for a little larger undulation of the surface of the slopes below the line of walk which the air-duct will cross, and which leads northwardly from the foot of the western stair-case. This will be an improvement that would have been made sooner but for the necessity of bringing the material from a distance.

SENATE STABLES AND ENGINE-HOUSE.

Various repairs and improvements have been made to these buildings, at a cost of \$400.

FISH COMMISSION BUILDING.

The Armory Building, on the Mall, city of Washington, has, in compliance with the act approved March 2, 1889, been arranged and fitted up for the accommodation of the offices of the Commissioner of Fisheries,

and the work is so far advanced at this date as to permit the Commissioner to vacate the rented premises heretofore occupied as his offices.

A large frame store-house has also been constructed in connection with this building, for storing material connected with the Smithsonian Institution.

COURT-HOUSE, WASHINGTON, D. C.

Large coal-vaults have been constructed at the north front of this building, at a cost of \$2,400.

Sundry repairs have been made to the interior of the building also, costing \$1,000.

BOTANIC GARDEN.

Among the most important improvements made at this place were supplying and putting in place new hot-water boilers for the conservatory and putting down granolithic pavement at the First street entrance.

All the smaller buildings have been kept in reasonably good repair, a large amount of painting and glazing having been done to them.

The injury done to the conservatory by the storm of September 17, 1888, has been repaired. These damages were extensive; for, besides the breakage of about two thousand lights of glass, the heavy iron chimney-cap was blown off, some of the iron ribs of the dome were broken, and one wall of the building was bulged six inches out of line.

The cost of these repairs was paid out of the fund provided for the usual annual repairs, and in consequence some work which was estimated for had to be omitted, as the repairs to the conservatory were imperative, the most valuable plants in the collection being stored in this building.

The disbursements under each head made by the disbursing agent of the Department of the Interior for the works within named, are given herewith somewhat in detail.

FOR WORK AT THE CAPITOL AND FOR GENERAL REPAIRS THEREOF.

Pay rolls, mechanics' labor, etc.	\$25, 163. 62
Labor, by voucher.	990. 29
Paints, oils, and glass.	1, 208. 09
Materials for plumbing and steam-fitting.	1, 876. 91
Hardware, iron, etc.	1, 120. 77
Hauling and expressage.	57. 84
The care and repairing clocks in Rotunda and Statuary Hall.	100. 00
Forage.	144. 00
Stationery.	115. 91
Silver and nickel plating.	158. 90
Bricks, lime, and sand.	104. 40
Grate-bars and fire-brick.	145. 13
Brushes, brooms, sponge, soap, etc.	558. 62
Lumber.	957. 56
Asphalt concreting.	8. 00
Chimney-caps.	264. 00
Coal.	45. 70
Material for covering doors.	82. 13
Harness.	20. 00
Repairs to engines and for material.	972. 68
Flooring tile.	266. 95
Miscellaneous.	104. 28
Balance unexpended.	536. 22
Total.	35, 000. 00
Amount appropriated October 2, 1887.	35, 000. 00

THE CAPITOL TERRACES.

Pay rolls, laborers, mechanics, etc.	\$47,296.70
Labor, by voucher.....	846.95
Marble and granite work.....	58,319.46
Bricks, lime, cement, and sand.....	14,261.25
Rolled-iron beams.....	3,904.05
Granolithic and artificial stone pavement.....	2,977.50
Vault lights, cast-iron work, etc.	775.50
Plumbing and gas-fitting material.....	1,449.57
Hardware and metals.....	871.74
Bronze work.....	1,139.55
Lumber.....	1,300.30
Laying stone flagging.....	158.02
Hauling and expressage.....	193.90
Coal.....	124.75
Advertising.....	2.48
Stationery.....	5.50
Miscellaneous.....	25.20
Balance unexpended.....	56,394.67
Total.....	190,047.09
Available July 1, 1888.....	190,047.09

THE CAPITOL GROUNDS.

Pay-rolls, laborers, mechanics, etc.....	15,375.72
Labor, on voucher.....	163.65
Trees and plants.....	475.05
Gravel, soil, fertilizer, seed, etc.....	872.04
Asphaltic pavement.....	1,046.56
Salary and expenses, landscape architect.....	544.09
Bronze and wrought-iron work.....	439.03
Tools and hardware.....	244.79
Artificial stone pavement.....	299.59
Paints and oils.....	32.38
Tinwork.....	29.00
Lumber.....	176.15
Brooms.....	103.75
Plumbing and material.....	94.34
Hauling freight, and express.....	79.12
Balance unexpended.....	24.74
Total.....	20,000.00
Amount appropriated October 2, 1887.....	20,000.00

LIGHTING CAPITOL AND GROUNDS.

Gas service.....	16,706.51
Pay-rolls, lamp-lighters, and plumbers.....	3,328.00
Gas-fixtures, and other material.....	474.95
Electric lighting service.....	3,476.41
Stationery (record book).....	12.00
Balance unexpended.....	2.13
Total.....	24,000.00
Amount appropriated October 2, 1887.....	24,000.00

ELECTRIC LIGHT PLANT, SENATE.

Electric lamps, for fixtures and for connections and other material.....	251.65
Balance unexpended.....	18,714.31
Total.....	18,965.96
Available July 1, 1888.....	18,965.96

STEAM BOILERS, HOUSE WING.

Pay-rolls, laborers, mechanics, etc.....	\$2,233.05
Abendroth & Root Manufacturing Company for steam-boilers.....	7,065.00
Fire-clay and bricks.....	750.31
Steam-pipe, fittings, and iron work.....	98.95
Advertising.....	15.78
Balance unexpended.....	1,836.91

Total	12,000.00
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Amount appropriated October 2, 1888.....	12,000.00
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FOR ARTIFICIAL PAVEMENT AND FOR FOUNTAIN IN FRONT OF TERRACE.

Bronze lamp-posts and vases.....	\$1,139.55
Draughtsman.....	60.00
Balance unexpended.....	27,800.45

Total	29,000.00
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Amount appropriated October 2, 1888.....	15,000.00
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Amount appropriated March 2, 1889.....	14,000.00
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	29,000.00
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ALTERATION AND REPAIRS, ARMORY BUILDING.

Pay-rolls, laborers, mechanics, etc.....	2,031.73
Lumber and joiner work.....	998.81
Steam-fitting and material.....	996.19
Plumbing and gas-fitting and material.....	533.04
Painting and for materials.....	479.96
Plastering.....	430.00
Tin and copper work.....	369.97
Paper-hanging.....	121.45
Hardware.....	120.85
Gas-fixtures.....	61.65
Balance unexpended.....	856.35

Total	7,000.00
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Amount appropriated March 2, 1889.....	7,000.00
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Very respectfully,

EDWARD CLARK,
Architect United States Capitol.

The SECRETARY OF THE INTERIOR.

REPORT OF THE UTAH COMMISSION.

SALT LAKE CITY, *September 23, 1889.*

SIR: The Utah Commission respectfully submits the following report of its proceedings during the past year:

Immediately after the election for Territorial officers held in August, 1888, the Commission began the work necessary for the November election, at which a Delegate to represent the Territory in Congress was to be chosen, by causing a thorough revision of the registration lists throughout the Territory, which was completed during the month of September.

The election was held on the 6th day of November, 1888, and was general except in a few precincts, the voters in which failed to take

sufficient interest to appear and vote, although judges of election had been appointed for each of said precincts.

Under the authority conferred by the act of Congress approved March 22, 1882, entitled "An act to amend section 5352 of the Revised Statutes of the United States, and for other purposes," the Commission, on the 3d day of November, 1888, appointed a canvassing board composed of five reputable citizens of the Territory, three of whom were members of the Liberal party, and two of the People's party, viz, Orlando W. Powers, Henry W. Lawrence, Robert W. Cross, Lewis W. Hills, and Frank J. Cannon, to canvass the returns of said election and declare the result.

This board of canvassers met at the rooms of the Commission in Salt Lake City, on Friday the 16th of November, 1888, and organized by each taking the oath prescribed by law, and electing a chairman and secretary from their number. It then, in the presence of the Commission, proceeded to canvass the returns of said election, as the same had been returned to the Commission by the various election boards, and, as the result of said canvass, reported to the Commission that John T. Caine had received 10,127 votes, R. N. Baskin had received 3,484 votes, and Samuel R. Thurman had received 511 votes, and that there were 7 scattering votes cast; and upon said canvass and report, the said John T. Caine was declared elected, and given the proper certificate of his election as Delegate to the Fifty-first Congress from Utah Territory.

The aggregate of votes cast during the two years since the passage of the act of Congress which took effect on the 3d of March, 1887, and is known as the "Edmunds-Tucker Act," upon the basis of the votes cast for members of the legislative council, is as follows:

Votes cast in 1887.....	16, 150
Votes cast in 1889.....	20, 495
Increase in 1889 over 1887, 4,342, or 26 $\frac{8}{11}$ per cent.	

An election was held in August, 1888, for a portion of the county officers in each county in the Territory, at which the aggregate vote cast was 15,012, a falling off of 1,138 votes from the August election of the year previous, while at the election for Delegate to Congress, held on the 6th of November, 1888, the aggregate vote cast was 14,129, which was 2,021 votes less than were cast at the August election in 1887 and 883 votes less than were cast at the August election in 1888. This falling off in the votes can be reasonably accounted for by the fact that greater interest is taken in those elections at which members of the legislature are chosen, which is manifest in the increased vote of 1889 over that of 1887, although a portion of this increase is doubtless caused by the influx of population which is continually coming into the Territory.

The comparatively meager vote for Delegate in Congress may be partially accounted for in the fact that the People's party, or the Mormons, are largely in the majority in the Territory, and while the Liberal party, or the Gentiles, as they are called, felt sufficient interest to name a candidate and to preserve their party organization, it was done without the remotest prospect or hope of success, and great numbers remained away from the polls. It is also probable that many of the People's party, regarding the success of their candidate as assured, did not take the trouble to vote where it was attended with any considerable inconvenience.

Since our last report, the Commission has caused municipal elections to be held in the following cities and towns:

Cities and towns.	Counties.	Cities and towns.	Counties.
1. Ephraim City.....	San Pete.	13. Park City.....	Summit.
2. Fountain Green.....	Do.	14. Ogden.....	Weber.
3. Manti.....	Do.	15. Brigham City.....	Box Elder.
4. Beaver City.....	Beaver.	16. Bear River.....	Do.
5. Alpine City.....	Utah.	17. Corinne City.....	Do.
6. Payson.....	Do.	18. Grantville.....	Tooele.
7. Pleasant Grove.....	Do.	19. Tooele City.....	Do.
8. Spanish Fork.....	Do.	20. Kanab.....	Kane.
9. Lehi.....	Do.	21. Monroe.....	Sevier.
10. American Fork.....	Do.	22. Fillmore.....	Millard.
11. Springville.....	Do.	23. Heber.....	Wasatch.
12. Coalville.....	Summit.		

From the organization of the Commission to the present time, the registrations and elections held under its supervision have been free from all charges of fraud and unfairness, with a single exception.

In February, 1889, at the municipal election for the city of Ogden, in Weber County, there was a very bitter contest between the opposing parties, in which the Liberal, or Non-Mormon party, prevailed over the People's, or Mormon party, and carried the election for the first time in the history of the city.

The leaders of the People's party claimed that there had been frauds perpetrated by the Liberal party sufficient to bring about this result, both in the matter of registration and at the polls.

It is a noticeable fact, that notwithstanding these charges of fraud no action has been brought to test the legality of the election of any officer, either as to the manner of registration, or as to illegal voting at the polls, or as to the canvass of the returns. Nor has any specific charge of fraud ever been brought to the knowledge of this Commission, but only general charges made through the party newspapers or by individual members of the People's party, wholly unsupported by proof.

The commission has no information of anything like fraud being imputed in any case to the commission, but only to its agents in the persons of the registrars and judges of election appointed by it.

The Commission deem it just to itself to state that it has studiously endeavored in all instances to appoint the very best men to be procured who will accept the positions, selecting in each instance discreet, sober, honest, fair-minded men, as free from partisan influence and bias as practicable, and has invariably urged upon them to do equal and exact justice to all citizens of the Territory, without reference to creed or religion, and where an abuse of power by those appointed as registrars or judges has been brought to the knowledge of the commission it has not hesitated in its action, but has promptly removed such persons from office.

This, however, we are gratified to say, has occurred in but few instances, and the Commission takes great pleasure in bearing witness to the fidelity and efficiency with which the majority of its appointees have discharged their difficult duties, and to the uniform fairness of the elections throughout the Territory.

The complaint most frequently made to the Commission is, that the registration lists of Salt Lake City, and of Ogden, contain each a large number of names of persons who can not be found on inquiry and search, and that they are kept there by the registration officers to enable the

Liberal party to have the names represented by persons who are not legal voters.

It has not been brought to the knowledge of the Commission in any way that this fraud has been perpetrated in a single instance, but in order to satisfy the seeming fears of leading members of the People's party the Commission proceeded to Ogden prior to the last election, and held a conference with the registrars and judges of election appointed by the Commission, in the presence of a number of leaders and official representatives of the People's party, and agreed upon rules for the conduct of the approaching election which were satisfactory to both parties, and the Commission has since heard no complaint in regard to the fairness of that election, and does not believe that the frauds anticipated therein, or those charged in the former elections, were attempted to be practiced.

The whole trouble in regard to the condition of the registration lists complained of is owing to the laws in regard to registration and elections enacted by the territorial legislature, which is the creature of and dominated the People's party, or Mormon party, and those laws must be amended before any right of complaint will exist.

All registered voters have been required to take the oath prescribed by law before being registered, and these oaths are filed in the office of the probate court of the respective counties.

In making the revision of the registration lists the registrar is required "to make careful inquiry if any person whose name is on his list has died or removed from the precinct, or is otherwise disqualified as a voter of such precinct, and, if so, to erase his name therefrom." (Compiled Laws of Utah, Vol. 1, page 319, sec. 240.)

It will be seen from this that he can only erase names while revising the lists when he has satisfactory information that the registered voter "has died or removed from the precinct, or is otherwise disqualified as a voter." The simple fact that he does not find him is not sufficient.

After the revision it is provided that the lists be posted for fifteen days, and for hearing objections to the right to vote of any person registered until sunset of the fifth day preceding the election, but this is restricted by a somewhat remarkable provision of the statute, as follows:

Said objections shall be made by a qualified voter in writing, delivered to said justice (under the Edmunds law the registrar acts instead of the justice as mentioned in the Territorial act), who shall issue a written notice to the person objected to, stating the place, day and hour when the objection will be heard. *The person making the objection shall serve, or cause to be served, said notice upon the person objected to, and shall also make returns of such service to the justice before whom the objection shall be heard.* (Comp. Laws Utah, 320, 321, sec. 246.)

There is no other provision in the law for purging the registration lists, and it is impossible to serve the notice required, if the person objected to has died, removed, or is absent and can not be found, and if it be a fact, as alleged, that many names of non-voters are upon the lists, it is the fault of the law and not of the registrars, and the law should be amended.

When the Commission was first organized, it was a matter of grave consideration with the able men then composing it, headed by that wise and safe counselor ex-Governor Alexander Ramsey, as chairman, as to the proper policy to be pursued in discharging the very responsible as well as delicate trust committed to its direction.

After mature thought and deliberation, it was unanimously considered by the Commission that, under the act of Congress establishing it, the duty of the Commission was to so shape its policy, and the administration of the affairs committed to it, as to be in harmony with the

spirit of the laws of Congress regarding the principal and perhaps sole object in view in its creation to be the extinction of polygamy, and the stamping out, as far as possible, of all polygamous influences and tendencies.

How best to accomplish this was a grave question, and was approached with some hesitation and much serious thought, but as subsequent events have shown, was determined wisely.

The act of Congress of March 22, 1882, commonly known as the "Edmunds law," cut off polygamists, bigamists, and those who might thereafter be convicted of kindred offenses, from exercising the right of suffrage, and from the privilege of holding office in the Territory, and it became the duty of the Commission to exclude all such persons from participating in the elections.

The Commission did not, however, consider this to be the sole object of the law, but that it was also intended to make those offenses which were practiced by the Mormon people in direct violation of the law, and which were under the ban of civilization everywhere, odious.

In order to accomplish this, and to thoroughly convince the Mormon people of its earnestness of purpose, and to impress them with the idea that the Government, through its authorized agencies, meant that polygamy should be punished and eradicated, and its sovereign power in the enactment of laws for the suppression and punishment of crime should be respected and obeyed by all people within its jurisdiction and limits, the Commission adopted the rule of appointing registrars, wherever practicable, from the Gentile or non-Mormon element of the population, believing them to be more in harmony with the attempts to carry out and enforce the provisions of the law than members of the other party, and in the matter of judges of election, the law requiring three persons, it appointed, wherever they could be found, two out of the three from the non-Mormon element. In many precincts none but Mormons were to be found, and in such places Mormons were appointed. They have thus had representation upon all election boards, and entire control of some.

This policy of the Commission has been steadily pursued to the present time, and, it is believed, with the most satisfactory results, as evidenced by the steady increase of the anti-Mormon vote, and by the abandonment, except in some remote districts, of the open practice of those offenses for the suppression of which the law was enacted.

Notwithstanding these results, this line of policy has not met the unanimous approval of the non-Mormon element, which has repeatedly urged the Commission to the adoption of more stringent regulations, some of which were not only considered by the Commission to be of doubtful expediency, but to be without the pale of the law and in excess of its powers as defined by law.

At the same time the non-Mormons were complaining because the Commission failed to inaugurate the extreme measures urged by them the Mormon element was making numerous complaints as to what they denominate the injustice done them in denying to them equal or proportionate representation in all positions which the Commission has power to fill.

There would be some degree of plausibility in their demands if the population and the division of the political parties were to be considered numerically only, for the Mormon element is largely in the majority in most of the voting precincts, the exceptions being in two or three cities where the anti-Mormon element has centered and in the mining districts.

But the Commission has acted on the idea that it was the intention of Congress to impress upon the Mormon people that it has a fixed purpose to compel obedience to the laws enacted by it, and, if possible, to bring them and their institutions into harmonious relations with the General Government; that to do this it has prescribed grave punishments for offenses either sanctioned or tolerated by them and a denial of the right to participate in the affairs of the Government by voting or holding any office of honor, trust, or profit to all who are guilty of such offenses, and thereby to convince those who are not actual offenders and criminals, but who adhere to the same creed and lend their moral, if not open, support and encouragement to those who do violate the law, concealing their crimes and persons from the officers of the law and ostracising those of their number who give aid in enforcing the law in any manner; that they, to that extent, are under bans and not to be promoted to places of trust and emolument so long as they thus give aid and comfort to those who defy the law and lionize those who are convicted and punished as heroes and martyrs who have suffered persecution for conscience sake by meeting them with bands and triumphal processions as they leave the door of the penitentiary and promoting them to higher offices in the church.

It may be considered a quasi punishment imposed upon them while they are still permitted to use the ballot in all elections held in the Territory. It is quite certain, too, that if Mormons were placed in control of the election machinery they would give the most liberal construction possible in favor of the peculiar practices and tenets they profess to hold as revelations from God.

We therefore insist that the Commission did right originally in adopting the rule that the duties pertaining to registrations and elections should be placed in the hands of and be performed by those who were not in sympathy with the Mormon church and creed, and that the wisdom of a strict adherence to that line of policy has been demonstrated by the changes that have been produced and in the awakened prosperity and progress which are everywhere visible.

Polygamy is not at the present openly practiced, except perhaps in a few remote and out of the way places, but the non-Mormon element insists that plural marriages are solemnized clandestinely and practiced secretly in the larger centers and throughout the Territory. This may or may not be true. This Commission neither affirms nor denies in the absence of positive evidence. We know this, however, to be a fact. There are places where Mormons must necessarily be appointed registration officers for the reason that no Gentile qualified to hold the position is to be found in the community in which the duties are to be performed. This Commission annually sends out circulars to each registration officer in the Territory, requesting him to report any cases of which he may have knowledge, or reasonable cause to believe, of parties who have entered into polygamy or bigamy, and while from a number of places reports have been made by Gentile registrars, giving names, times, and places as nearly as practicable, not one case has ever been reported by a Mormon registrar, although it is sometimes strongly asserted, and generally believed, that the practice has been indulged in openly in some of their precincts.

Doubtless many members of the Mormon church never have practiced, and never intend to practice polygamy, and perhaps many of them, *per se*, do not believe in the practice, but from the stand-point of their faith and creed they accept it as a revelation from God, through the Prophet, Seer, and Revelator, Joseph Smith, ratified, confirmed, approved, and

practiced by their great President, Brigham Young, and their so-called Apostles; believe that it is approved and sanctified by inspiration, and the unbroken and warm approval of the church and all its saints and dignitaries, a majority of whom have practiced it for more than half a century; that it is permitted and justified by the Almighty and in the teachings of the Bible, and that whoever desires to do so should have the right to comply with this ordinance of the church, as well as that of baptism or any other, and that the person who does so will attain a higher exaltation in heaven than he who contents himself with one wife.

While the individual member may not wish and will not take more than one wife, if his neighbor wishes two or more he thinks it right for his neighbor to have them, and that he should not be molested in the enjoyment of the provision of what he regards as the "higher law," and if his neighbor for this be convicted of an offense against the laws of the land he is in his eyes persecuted instead of prosecuted, and becomes one of the martyrs of the church.

All laws forbidding the practice he pronounces unconstitutional, as an interference with religion, and he devoutly believes he is under no obligation to obey them, except under compulsion.

That some grounds exist for the belief, so prevalent in Utah, that polygamy is still taught by the church as a saving ordinance and is secretly practiced by its devotees, is evidenced by public utterances of its leading authorities and teachers, and by publications in the printed organs of the church. The instances of this which will be given are not selected from antiquarian documents, nor from the utterances of obscure and unenlightened men, but are from the mouths of those in authority and are of to-day.

The Deseret News is the official organ of the so-called "Church of Jesus Christ of Latter-Day Saints," and of the People's party of Utah. Wilford Woodruff is the president and official head of the church, and George Q. Cannon, ex-delegate to Congress, bears the title of president, councillor, apostle, and perhaps many others, and the "councils" of both have great if not controlling influence over the minds of their followers. They speak *ex cathedra*, and their slightest expressions have the weight of "thus saith the Lord."

The Deseret News of June 24, 1889, contains "remarks by President George Q. Cannon at a priesthood meeting, held at Manti (San Pete Stake conference), May 19, 1889, reported by A. Winter," in which the following appears:

Every young man and every young woman should live so that he or she can get a recommendation from the bishop to go to the temple and be married according to the holy order which God has revealed.

In its issues of July 15, 1889, are the remarks of the same distinguished teacher, delivered in the tabernacle on the preceding day, Sunday, July 14, from which extracts are given which seem to teach that all the church has taught is righteousness, and not sin, and that the persecutions of the "saints" for the crime of polygamy are "persecutions":

The hold that the Gospel of the Lord Jesus Christ has taken upon the hearts of those who have embraced it in our day is due to the fact that the message was a true one, that the promises made were fulfilled, that those who obeyed had received the testimony according to the promise that had been given. If it had not been so, these valleys would not now be peopled by Latter-Day Saints; these settlements—extending north and south, east and west—would not have had an existence; this tabernacle would never have been built; this temple, so near its completion, would never have had a foundation-stone laid. But because the message was from Heaven, and

because Heaven bestowed the gifts and blessings as the elders had promised, therefore the Latter-Day Saints have gathered together here; they have come from various lands; they have obeyed the voice of God, and have testified that through their obedience they have received the fulfillment of that promise.

It is this that has created this cohesion, this union, this identity of interests, this oneness in knitting the people together and making them to a great extent of one heart and one mind. Now, if there had been anything connected with this message that would have invited or enticed men to do evil and to have strayed from righteousness, those who heard it would have had evidence that it was not of God, that God had not inspired those men to teach such doctrines. But who is there that has heard the Gospel of the Son of God preached now for these nearly sixty years has ever heard any sentiment, any doctrine that has enticed men to do evil, taught by a servant of God? On the contrary, the world can know for itself; and in this respect the world is left without excuse. At no time nor under any circumstances has error, sin, and wickedness been taught by those who have held authority in this church to teach the people.

Joseph Smith was killed by wicked men in a most cruel, heartless, and dishonorable manner; but from the time that he first stood before the people and declared unto them the message which God had given unto him, up to the last hour of his life, no one heard proceeding from his mouth any doctrine, any principle, counsel, or suggestion that was not of God and that did not invite men to do right and forsake sin. So it has been from that day until the present. It has been a constant characteristic of the teaching of the servants of God. They have entreated the people, they have labored earnestly and unceasingly with them to do right, to serve God, to keep his commandments, to forsake sin. They have denounced in unmistakable terms everything that was iniquitous and wrong, and the people have been taught invariably that it is far better for them to suffer persecution for keeping the commandments of God than to do anything that would grieve the spirit of God or cause it to be withdrawn from them. These have been the constant teachings of this church, and if we have been persecuted it has not been for sin. If any of our people have had their blood shed, it is not because they have violated the commandments of God; it has not been because they were greater sinners than their fellows. If any of them have been sent to prison it has not been because they have done that which God has commanded should not be done; it has not been because of unrighteousness on their part or flagrant wickedness; but it has been because they have striven, according to the light and knowledge which they possess, to do that which God required at their hands.

In no instance has it been proved that the Latter-Day Saints have gone in defiance of the word of God contained in the Old and New Testament. Our doctrines are before the world for them to investigate; for them, if they be wrong, to disprove. If we have been persecuted, then, it has not been for sin. There has been no new thing in the earth; for it would be a new thing if the wicked should be persecuted by the righteous. Such a thing has never occurred from the beginning of time. Whoever heard of righteous men banding themselves together to persecute and punish the wicked? Invariably it has been the case that the righteous have been persecuted by the wicked; that laws have been trampled upon; that good order has been overthrown in order to reach and punish righteous people. The Latter-Day Saints have been driven from their homes in the States; their houses have been burned, their property destroyed, and they themselves have been driven out. Some of them have been murdered and others have fallen through persecution by the wayside; but it has not been because they were more wicked than other people. The laws were not trampled upon, the Constitution was not violated in order to punish the wickedness that could not be punished by any other means. It has been because we have received and taught, as we believed, the everlasting Gospel—the Gospel of the Son of God.

* * * * *

I hear of murmuring. This is a time of trial for the Latter-Day Saints. We have now for upwards of four years been undergoing persecutions—some have called it prosecution; but it has assumed a form of persecution in many instances. One class has been greatly tried; their faith has been greatly tested, women and children especially. They have had to undergo many afflictions; they have had to bear many sorrows. True, a good many of the people have not felt the burden of this persecution or prosecution—choose which term you please—beyond the natural sympathy they had for their brethren and sisters in affliction.

On the 27th of July, 1880, the News republished from the Ogden Standard, another paper published in the interest of the church, a highly laudatory obituary of "Elder Amos Maycock," bishop of North Ogden, and councillor to the bishop of Pleasant View, which, in enu-

merating the many virtues of the deceased, gives prominence to the following:

In 1861 he married Mary Humphries, and in 1875 Mary Crandall, living with them both until 1889 [probably a typographical error for 1885], when he was arrested and convicted by his own testimony of unlawful cohabitation, two counts having been made. He was sentenced by Judge O. W. Powers February 23, 1886, to five months in the Utah penitentiary, and to pay a fine of \$100 and costs on the first count, and before serving his full term he was sentenced to six months' imprisonment on the second count, being one of the first subjects of the segregating system. During his imprisonment he did not murmur, but firmly maintained his integrity to the principles he had espoused. * * * He died in the hope of a glorious resurrection.

The same paper, on the 16th of July, 1889, contained a lengthy editorial upon the issues of the approaching election, entitled "A word of warning," in which it says:

Let us stand by one another and maintain our civil and religious rights.

On the 10th of August the News contained "remarks by President Wilford Woodruff at Grantsville (Tooele State conference), Monday morning, July 29, 1889, reported by A. Winter," in which the following occurs:

Now, brethren and sisters, we are trying to prepare ourselves for exaltation and eternal life. We have received the holy priesthood. There is no change to that priesthood. It belongs to the celestial kingdom of our God. It does not belong to the terrestrial but to the celestial kingdom. If you and I ever get into the celestial kingdom we have got to keep the law of that kingdom. Show me the law that a man keeps and I will tell you where he is going. We, as Latter-Day Saints, have everything to encourage us. We have received the Gospel of Christ and the blessings thereof. What did we know in regard to God and salvation until the Lord revealed himself? Who ever knew, before the Lord revealed it to us, that a man could have his wives and his children with him in the morning of the resurrection in the family organization, with himself at the head, to dwell together for ever and ever?

What these "constant teachings" of the church in which "there is no change" consist of are revealed more fully in the following extract from the same paper of the same date:

The following is the result of an interview between a reporter of the Norwich (England) Daily Press and Elders T. E. Bassett, P. W. Baker, Isaac Seara, Joseph Gibbons, and E. Richins, missionaries from Utah. Of course in some respects the comments of the newspaper man are tinged with anti-Mormon prejudice, but the article aids in spreading the news that preachers of the Gospel of Christ are in that part of the country, and, as a whole, the report is about as fair as one may expect from a non-Mormon press. * * * The president, by name Thomas E. Bassett, is a youngish looking man of not more than thirty, perhaps, and appears to be the junior by several years of at least three of his colleagues. All of them spoke with an unmistakable American accent. Their manner was mild and subdued, and it was hard not to feel that this mission across the Atlantic is a matter of intense religious import. * * *

"I observe that nothing is said in your articles of faith about polygamy."

"No; and in preaching it we do not advocate it; but we think it is permissible, because there is nothing in the Scriptures forbidding it. It was commanded of God anciently. The number of Mormon men having more than one wife is estimated at from 7 to 10 per cent. of the total adult population of Utah. We do not even persuade men to take one wife. Our mission is simply to preach the first principles of the Gospel." * * *

"The Mormon church seems to have got itself into hot water with the United States legislature in regard to polygamy. How can you go on practicing it in view of your article 12, which proclaims objection to the law?"

"But [said the president] we do not believe that the legislature in trying to uproot polygamy and confiscate our church property is acting in accordance with the law. The Constitution of the United States says that Congress shall make no law respecting the establishment of religion or prohibiting the free exercise of religion. Now polygamy is a part of our religion, and we hold that the law passed in prohibition of it is unconstitutional and therefore carries with it no obligation to be obeyed. The permission to practice polygamy has been revealed to us by our heavenly Father, and we believe it will tend to the salvation of the human family and ameliorate its condition here on earth."

That the teachings and practice of polygamy have not been discontinued, as is claimed by some, is further proven by the number of convictions for sexual offenses against the laws of Congress in the district courts of the United States for the Territory. The number of convictions for that class of offenses since September 1, 1888, is as follows:

Court.	Polygamy or bigamy.	Adultery.	Fornication.	Unlawful cohabitation.	Total.	Sentence suspended.
First district (Provo)	2	42	10	131	185	45
First district (Ogden)	4			⁴ 102	106	
Second district (Beaver) †		1	1	19	21	
Third district (Salt Lake)		3		42	45	2
Total	6	46	11	294	357	47

*This number includes convictions for adultery and fornication, not having been separated in the report to the Commission.

†The small number in the Beaver district may partially be accounted for by the fact that the court records were destroyed by fire early in the year, and consequently there have been fewer prosecutions.

In the opinion of the Commission, the influences brought to bear under the act of Congress creating it and those amendatory thereof, together with the vigorous administration of the criminal law by the courts, have had a marked influence in restraint of polygamy. That which a few years ago was practiced openly, and flaunted in the face of the world as the boast and pride of this peculiar people, has been driven to cover and the secrecy of other crimes. If plural marriages are now celebrated it is done in the secret chambers of the temples and endowment houses, where the light of the sun never enters and no eyes but those of priests and neophytes are allowed to witness the ceremonies.

If polygamy is practiced, it is with the secrecy with which the burglar guards his housebreaking and the thief his larcenies. Few convictions are had for polygamy. Few polygamous marriages can be proven within three years, the period of limitation, but the trials and convictions for unlawful cohabitation and kindred offenses, a frequent incident to polygamy, and generally with indications that they are of a polygamous character, are, as will be seen from the statistics presented, quite numerous in each of the three district courts of the Territory.

Those who are convicted invariably regard themselves, and are regarded by the church, as martyrs. When one is convicted, the usual announcement in the organ of the church is that he has been convicted of "living with his wives," or of "living his religion." Those eminent in the church who have been convicted of sexual crimes, on emerging from the penitentiary, have in some instances been met at the prison doors by brass bands and a procession with banners, escorted to their homes to be toasted, extolled, and feasted as though it were the conclusion of some brilliant and honorable achievement, rather than the expiration of a sentence, an expiation for a crime committed against the laws of the country, and a disgraceful confinement within the walls of a penal institution.

It is not regarded as any disgrace by the Mormons of Utah to have served a term in the penitentiary for any of the sexual offenses inhibited by the laws of Congress. On the contrary it is regarded as a badge of merit, and as entitling the persons so convicted to promotion in the church, as has been the case in some instances.

The law, as administered by the courts, mercifully keeps open the door to escape punishment for all convicted of polygamy by offering them a suspension of sentence, and amnesty for the past, upon the sole condition that they make a promise in open court to obey and live within the laws, and keep the same; yet few accept the offer so graciously made, nearly all preferring the prison life and its privations to a renunciation of the article of their creed which puts them under the ban of the law and at war, as it were, with the Government which gives them protection.

Fear of punishment for their crimes, dread of further and more stringent legislation, and a policy dictated by the hope of statehood at an early period, when they would be the State and make and administer the laws in accord with their peculiar institutions and pretended revelations, are sufficient motives to account for the prudent submission that is shown at present.

In view of the late great effort made by them to bring about statehood for Utah, this thought suggests the inquiry, suppose the Edmunds law of 1882 and the Edmunds-Tucker act of 1887 were repealed, and all things placed subject to the same control and conditions as prior to their enactment, how long would affairs remain even in their present condition? How long before the presidents, apostles, elders, and the priesthood generally, would parade the streets at the heads of their harems? How long would any gentile or non-Mormon be permitted to hold or exercise the duties of any office or place of trust in the Territory? How long, indeed, until a system of boycotting, which the priesthood knows only too well how to institute and make thoroughly efficient, would be brought into active working order and the gentile element, with its advanced civilization, its trade and its traffic, be driven from the Territory, and the Mormon theocracy be made supreme? Speculation upon these queries is profitless while the supposed condition of affairs is improbable, but their consideration may enable those who care to consider them to judge of the present outward marks of the securing acceptance of the situation, and of the acquiescence in and obedience to the law by the Mormon people, while they insist through their newspapers and from their pulpits that these laws of Congress are unconstitutional and void, and should neither be enforced nor obeyed, and who fail to draw any distinction between opinions upon the subject of religion, and the commission of crimes against the highest law-making power of the nation and the universal sentiment of the enlightened world.

Since September 17, 1888, there have been held under the supervision of the Commission one general election, one election for Delegate in Congress, and twenty-three municipal elections, a total of twenty-five elections.

At these elections the following number of officers have been chosen:

Delegate in Congress.....	1
Territorial officers.....	3
Members of the Territorial legislature.....	36
County officers.....	78
Municipal and precinct officers.....	244
Total.....	362

The Commission has appointed—

Registration officers.....	363
Judges of election.....	1,284
Total.....	1,647

There were registered voters in Utah—

In 1887	19,720
In 1888	24,925
In 1889	31,201

The increased registration in 1888 over 1887 was 5,205, or 26.3 per cent.; in 1889 over 1888 it was 6,276, or 25.2 per cent; in 1889 over 1887 it was 11,491, or 58.2 per cent.

The number of polygamous cases reported to the Commission by its registration officers since September 17, 1888, was twenty-nine.

No registration officer belonging to the Mormon Church, reported any such case from his precinct, although reports of such cases not infrequently came to the Commission unofficially.

In order to promote as far as practicable a fair and impartial election, the Commission on the 31st of July, 1889, issued, and caused to be published in the newspapers throughout the Territory, the following circular of advice and instruction:

OFFICE OF THE UTAH COMMISSION,
Salt Lake City, Utah, July 31, 1889.

To the officers of election and voters of Utah Territory:

The Utah Commission, being charged with registration and elections in the Territory, after due consideration have thought it advisable to make this public appeal to the registration officers, judges of election, and voters at the election to be held on the 5th day of August next.

The Commission is desirous of having, and as far as it has authority of law is determined to have, a fair and impartial election; that everything like fraud shall be put down; that every lawfully registered voter in the Territory shall have the privilege of depositing his ballot freely as he wishes and without intimidation, and that none who are not legally registered shall be permitted to vote, no matter what may be the circumstances.

The Commission suggests that judges of election in passing upon challenges at the polls shall do so impartially and fairly, rejecting none who are legally qualified, admitting none who are not, keeping in mind that the presumptions of law are in favor of the elector until the contrary appears.

Attention is respectfully called to the following section of the election law: "Any person who shall disturb or be guilty of any riotous conduct at any election in this Territory, or who shall disturb or interfere with the canvassing of the vote, or interfere with the making of the returns, or who shall interfere with any voter in the free exercise of the elective franchise, shall be deemed guilty of a misdemeanor." (Compiled Laws of Utah, 1888, vol. 1, p. 336, sec. 266.) It is suggested that prompt arrests be made for any violation of this statute.

In the interest of fairness the Commission further suggests that in all towns and cities that no person except the registrar or his deputy, judges of election, the sheriff or his deputies, and such challengers (not more than two) as may be selected by each party shall be permitted to remain within 100 feet of the polls, and, as far as practicable, have it so arranged that but one voter shall approach the polls at one and the same time, and when one voter has voted he shall immediately pass beyond the limits fixed for approach to the polls.

The Commission most earnestly invoke all good citizens and all parties to lend their influence in aid of a fair and honest election; that they frown and stamp upon all frauds or attempted frauds tending to unfairness at the polls or in the returns of election, ever keeping in mind the great truth that the freedom of the American people depends on the purity of the ballot-box.

The Commission takes great pleasure in bearing witness to the fairness in all elections heretofore held under its authority and management, and with great confidence looks to the same result in the approaching election.

The manhood of Utah can not afford to prostitute itself by frauds in elections.

Respectfully,

G. L. GODFREY,
Chairman.

This circular was received and acted upon favorably by the registrars and judges generally throughout the Territory, and the Commission is much gratified to be able to say that, so far as it is informed, the elec-

tion was attended with perfect fairness and regularity, and the usual complaints and charges of fraud were almost wholly wanting.

The Commission appointed a board of canvassers to canvass and make return of the election returns, consisting of five reputable citizens of the Territory, three of whom were chosen from the Liberal or Non-Mormon party, and two from the People's or Mormon party, viz: William C. Hall, Salt Lake City; Hugh M. Dougal, Springville; A. H. Nelson, Ogden; Elias A. Smith, Salt Lake City, and Heber M. Wells, of the same place.

This board of canvassers met at the rooms of the Commission, at Salt Lake City, on the 19th day of August, 1889, and after each taking the oath of office, organized by electing from their number a chairman and secretary, and under the supervision of the Commission canvassed the election returns of the several precincts, except for members of the legislative council and house of representatives, and made the proper returns of said canvass to the Commission, which ordered certificates of election to be issued to the officers declared to be elected.

The Commission, as required by act of Congress, itself canvassed the returns from the various precincts for members of the legislative council and the house of representatives, and issued certificates of election to all those persons shown by the returns to have been elected, except in the case of Samuel R. Thurman, representative elect from the sixteenth representative district.

The certificate of election was withheld in his case by reason of the Commission having been officially notified by Hon. C. S. Varian, district attorney for the United States for Utah, that said Thurman had, within a few days after the election, been arrested, and on examination before a United States commission had been held to answer to the grand jury on a charge of violation of the laws by unlawful cohabitation, which charge, if sustained, would render him ineligible for the responsible position to which he was chosen. There is a probability that he will be tried before the time for the assembling of the legislature, and, if acquitted, the proper certificate of election will be issued to him.

The result of the election for members of the legislature was—

For the legislative council:

Liberals or anti-Mormon	2
People's or Mormon	10
Total	12

For the house of representatives:

Liberals	5
People's	19
Total	24

The result, most gratifying to the members of the Liberal party, and correspondingly distasteful to the People's party, was the demonstration that, in a hotly-contested election, the Liberal party had polled a majority of 41 in the vote of the city of Salt Lake, and had secured a voice which could be heard and an influence which could be felt in both branches of the legislature.

An instance of the temper and disposition of the Mormon party under defeat, where they have the power left to show the intense aversion they have to anything not under their own control, is to be found in their official action since the result of the recent election in Weber County and the city of Ogden was known.

Ever since Ogden has had an organized municipal existence it has

constituted but one precinct, though divided into several polling places, and had but one justice of the peace under the Territorial law which provides one such magistrate for each precinct.

At the August election the Anti-Mormon element of the precinct proved to be in the majority, and elected an "Anti-Mormon" to be justice of the peace for the ensuing term of two years.

Within three days after the election the county court, which is composed of Mormons, except the probate judge who is *ex-officio* a member and is appointed by the President, made an order—as they had the power to do under the Territorial law—abolishing Ogden precinct, and in its stead creating four precincts, and again proceeding to act under the power given it by the Territorial statutes appointed four justices to fill the vacancies caused by the abolition of the old and the formation of the new precincts.

Another instance is in point. In Beaver County, under former Territorial laws, the probate judge has always been a Mormon, and was always allowed by the county court a salary of \$200 per annum. Congress having lately by law provided for the appointment of the probate judges by the President of the United States, and the President having appointed a non-Mormon as probate judge for Beaver County, immediately after his appointment the Mormon county court met and reduced his salary to \$5 per annum.

On the 14th day of August, 1889, the Commission adopted and caused to be published the following regulations to govern the conduct of the municipal election to be held in and for Salt Lake City, February 10, 1890:

CIRCULAR OF THE UTAH COMMISSION.

Suggestions for the municipal election.

The Utah Commission issues the following circular to the registration officers who are to act for the municipal election to take place in Salt Lake City, February 10, 1890:

(1) The Utah Commission will appoint one chief registration officer for the city of Salt Lake, and one deputy registration officer for each municipal precinct in said city, who shall commence the work of registration on Monday, the 4th day of November, A. D. 1889, and complete such registration as soon as practicable.

(2) It shall be the duty of the city registration officer prior to the 1st day of November, A. D. 1889, to apply to the county clerk of Salt Lake County for a certified copy of the registry-list, as last returned to him, of all the precincts within the corporate limits of said city.

(3) Said registration officer, upon the receipt of said lists, shall, by himself or deputy, and before the third Monday in December next, which will be the 16th day of said month, visit every dwelling-house and place of abode in each precinct of said city, and make careful inquiry if any person whose name is on said list has died or removed from the precinct, or is otherwise disqualified as a voter, and if so, to erase the name therefrom; or whether any qualified voter resides therein whose name is not on said registration list, and if so, he shall ascertain upon what ground said person claims to be a voter, and shall require any such person entitled to vote and desiring to be registered to take and subscribe to the following oath:

TERRITORY OF UTAH, *County of Salt Lake:*

I, ———, being duly sworn (or affirmed) depose and say that I am over twenty-one years of age, that I have resided in the Territory of Utah for six months last past and in this precinct for one month immediately preceding the date hereof; that I am a native-born (or naturalized as the case may be) citizen of the United States; that my full name is ———, that I am ——— years of age; that my place of business is ———, that I am a (single or) married man; that the name of my lawful wife is ———, and that I will support the Constitution of the United States and will faithfully obey the laws thereof, and especially will obey the act of Congress approved March 22, 1882, entitled "An act to amend section 5352 of the Revised Statutes of the United States in reference to bigamy and for other purposes," and that I will also obey the act of Congress of March 3, 1887, entitled "An act to amend an act

entitled an act to amend section 5352 of the Revised Statutes of the United States in reference to bigamy and for other purposes, approved March 22, 1882," in respect to the crimes in said act defined and forbidden, and that I will not, directly or indirectly, aid or abet, counsel or advise, any other person to commit any of said crimes, defined by acts of Congress as polygamy, bigamy, unlawful cohabitation, incest, adultery, and fornication.

Subscribed and sworn to before me this — day of —, 1889.

Deputy Registration Officer for — Precinct, — County.

(4) Although the person applying to have his name registered as a voter may have made the foregoing oath, yet if the registrar shall, for reasonable or probable cause, believe that the applicant is then, in fact, a bigamist, polygamist, or living in unlawful cohabitation, or associating or cohabiting polygamously with persons of the other sex, or has been convicted of bigamy, polygamy, unlawful cohabitation, incest, adultery, or fornication, in our opinion the registrar may require the applicant to make the following additional affidavit:

TERRITORY OF UTAH, *County of Salt Lake*:

I, —, further swear (or affirm) that I am not a bigamist, polygamist, or living in unlawful cohabitation, or associating or cohabiting polygamously with persons of the other sex, and that I have not been convicted of the crime of bigamy, polygamy, unlawful cohabitation, incest, adultery, or fornication.

Subscribed and sworn to before me this — day of — A. D. 18—.

Deputy Registration Officer for — Precinct, Salt Lake City.

(NOTE.—Those parts of the above forms in relation to being sworn or affirmed and as to being a native-born or naturalized citizen, or as to being single or married man, should be changed by erasure or a line drawn through the words, so as to be applicable to the case.)

Upon the receipt of such affidavit the officer shall place the name of such voter upon the registry list of such precinct.

(5) It shall also be the duty of the registration officer to give public notice in the newspapers of the city at least one week beforehand that he will be and remain, by himself or deputy, at his office, the place of which shall be properly designated by street and number, during the week commencing on the 4th Monday in December next, which will be the 23d day of said month, for the purpose of entering on the registry list of any precinct in said city the name of any voter which may have been omitted, on such voter appearing and taking the oath aforesaid, if he has not previously taken and subscribed the same, and to make other corrections; that he shall remain at his said office from nine till twelve o'clock a. m., from two to five, and from seven to nine o'clock p. m., for the convenience of the public.

(6) The registration officers are urgently requested (and neglect thereof will subject them to removal) to make diligent inquiry and use all reasonable means to ascertain the names which appear upon the registry lists of all persons who have died, or permanently removed from the precinct, or are otherwise disqualified as voters, and to erase all such from the list, it being the earnest wish of the Commission to eliminate from the list the names of all persons who are not residents of the city, and not legally qualified under the law to vote.

(7) Upon the completion of the list the registration officer shall prepare triplicate lists in alphabetical order for each precinct, containing the names of all registered voters, one of which lists shall be filed in the office of the city recorder on or before the second Monday in January, 1890, which will be the 13th day of said month; one list to be posted up in each precinct at least fifteen days before the election (10th February, 1890), at or near the place of election, and the other list transmitted by him to the presiding judge of election of the several precincts for use at the polls, and the oaths or affirmation of the registered voters, immediately after the day of the election shall be delivered to the clerk of the probate court of Salt Lake County.

(8) Prior to the election the city registration officer shall cause to be written or printed a notice which shall designate the office or offices to be filled, and stating that the election will commence at — (designating the place for holding the polls), one hour after sunrise, and continue until sunset on the — day of —, 189—.

Dated at Salt Lake City, on this — day of —, A. D. 18—.

Registration Officer,

A copy of which should be posted up at least fifteen days before the day of election, in three public places in each precinct in the city, calculated to give notice to all the voters. It is the duty of the registration officer to give notice on the lists posted as aforesaid that the city registration officer will hear objections to the right to vote of any person registered, until sunset on the fifth day preceding the day of the election. Said objection shall be made by a qualified voter, in writing, and delivered to the said city registration officer, who shall issue a written notice to the person objected to, stating the day, place, and hour when the objection shall be heard. The person making the objection shall serve, or cause to be served, said notice on the person objected to, and shall also make return of such service to the city registration officer before whom the objection is to be heard. In our opinion the objection should specify the grounds thereof and should be made separately as to each person objected to; and actual personal service should be proved by the affidavit of the person making the same, unless service and return thereof be made by an officer authorized by law to serve process, and at least three days, notice should be given. Upon the hearing of the case, if said officer shall find that the person objected to is not a qualified voter, he shall, within three days prior to the election, transmit a certified list of all such disqualified persons to the judges of election appointed by the Commission; and said judges should strike such names from the registry list before the opening of the polls. In view of the numerous complaints that have been made with respect to the working of this provision of the law, the Commission recommends that when a decision is made by the registration officer, striking the name of a person from the list of voters, the fact be made known to him without delay, either orally or in writing.

(9) The Commission being solicitous to secure a perfect registration of the qualified voters of the city, and to prevent, as far as is in their power, all frauds in the election, further suggests as a matter of caution, and with a view to the identity of electors, that the registration officers of the different precincts in the city, at the time of making the registration list, shall enter opposite each name on the list the place of residence of the voter, by street and number, and his occupation; and in all cases of removal from one precinct to another that the residence from which the voter removed shall be entered, as well as the one to which the change is made; and to carry out this suggestion the Commission will furnish to the registration officers books properly ruled for the purpose.

G. L. GODFREY,
Chairman.

On the 21st of August it appointed a registration officer for the city and five deputy registrars for the several voting precincts, and the appointees having accepted, they were invited to and did meet with the Commission for more full and complete instruction in regard to the terms of the circular, which was fully explained to them, and received the promise of their entire concurrence and hearty support, and the Commission believes that the registration lists prepared by them will be purged as far as the law will permit.

The Commission in previous reports has made certain recommendations which were, in its opinion, necessary and proper to give force and effect to the provisions of the law under which it was created and which had not yet been enacted into law.

These may be summarized as follows:

(1) In regard to the courts. The conferring upon the district courts jurisdiction of all polygamous and sexual offenses without regard to the place in the Territory where committed; investing them with power co-extensive with that possessed by the United States circuit and district courts in the States in the matter of contempt and the punishment thereof; authorizing the process of subpoena to run from the Territorial courts into any other district of the United States; authorizing the selection of jurors by open venire; providing that when continuance is granted on motion of defendant, depositions of witnesses on the part of the prosecution may be taken on notice and used in case the witness be dead, absent from the Territory, or so concealed as to elude the service of subpoena, and that a sufficient fund to enable the prosecuting officers to efficiently perform their duties and enforce the laws be furnished by the Department of Justice to the proper law officers of the Territory.

(2) That prosecutions for polygamy and bigamy be exempted from the operation of the general statute of limitations.

(3) That the term of imprisonment for unlawful cohabitation, fixed by section 2 of the act of 1882, be extended to at least two years for the first and three years for the second offense. The Commission adds to this the recommendation that the term of imprisonment for polygamy, bigamy, and unlawful cohabitation be extended, and that hard labor be added to the punishment.

(4) That it be made a penal offense for any woman to enter into the marriage relation with any man, knowing him to have a wife living, undivorced, coupled, however, with the provision that in cases where a polygamous wife is called as a witness against the husband, her testimony could not be used in any future prosecution against her, and a like provision as to the husband.

(5) The appointment of the Territorial auditor, treasurer, commissioners to locate university lands, probate judges, county clerks, selectmen, assessors and collectors, recorders and superintendents of district schools, by the governor, subject to confirmation by the Commission.

(6) That all persons be excluded by law from making a location and settlement upon any of the public lands who shall refuse on demand to take and subscribe an oath, before a proper officer of the land office in which his or her application is made, that he or she does not cohabit with more than one man or one woman, as the case may be, in the marriage relation, and that he or she will obey the laws of the United States in relation to polygamy and bigamy.

(7) That the laws with reference to the immigration of Chinese, and the importation of contract laborers, paupers, and criminals be so amended as to prevent the immigration of persons claiming that their religion justifies the crime of polygamy.

(8) A Constitutional amendment forever prohibiting polygamy.

(9) The enactment of a law creating a board to consist of the governor, Utah Commission, and the secretary of the Territory, to apportion Salt Lake City into aldermanic and councilmanic districts.

The Commission respectfully recommends all these propositions to the attention of Congress, and in addition makes the following recommendations:

(10) Authorizing this commission, in its discretion, to cause to be made annually a new registration instead of revisions of former lists, and to make and enforce rules and regulations not inconsistent with the laws of the United States for the conduct of registrations and elections.

(11) That Congress pass laws for the government and conduct of public schools in the Territory of Utah.

(12) That as soon as the result of the census of 1890 is known, there be created a board consisting of the governor, Utah Commission, and secretary of the Territory with power to redistrict the Territory for legislative purposes.

Some of these propositions are of grave importance, and may provoke much discussion and adverse criticism. Those relating to the practice in the courts will be at once understood by our law-makers, and need no explanation.

The Commission asks power to make a new registration and to enforce rules and regulations regarding the conduct of registrations and elections, not from any desire to increase its duties and responsibilities, but because it believes new registrations to be simpler and better than revisions, and that better results would come from a judicious exercise of

such powers if conferred. Under the present laws of Congress it can only recommend a course of action to its registration officers and judges of election, and has a dual set of laws to govern its own actions, the laws of Congress, and the laws of the Territory, and the latter are not always free from questions of doubtful construction, and sometimes stand in the way of beneficial reforms, neither provided for nor inhibited by Congress, but within the spirit and purport of its expressed or known intentions.

In regard to a law establishing and regulating the management of free schools, the Commission is not of the opinion that the legislature of Utah, as likely to be constituted for some time to come, can be expected or trusted to establish a system of free schools in sympathy with the enlightenment of the age, or free from the teachings of polygamy and so-called revelations, and therefore recommend that Congress assume the duty of providing for the education and enlightenment of the youth of the Territory.

The Commission believes the limitation on prosecutions for polygamy and bigamy should be extended, among other reasons, because, under the peculiar missionary service of the church it is easy for one to enter polygamy, go on a mission for three years, and return to assume his polygamous relations, defying the authorities to punish him for the main offense, and be in danger only of prosecution for the lesser offense of unlawful cohabitation. The term of imprisonment for this offense should be increased to meet this state of affairs, and sentence of hard labor should be added, that their confinement may not be spent in idleness and glorification of their supposed martyrdom.

The Commission has no doubt that punishment of the woman for voluntarily entering the polygamous relation would do much to lessen her zeal for the peculiar institution, and thus tend to remove one of its strongest bulwarks.

It recommends the granting to the governor the power to appoint the officers named, because—

(1) He is more nearly than any other the representative of the power and majesty of the Government among the people of the Territory, and granting powers to him which will bring him more and more into direct contact with them would tend to increase their respect for the National Government, an element almost unknown among them.

(2) Because residing among them, he can better judge of the necessities of the case and of the qualifications of the officers to be appointed than would be possible if the appointing power should be vested in the President.

(3) Because such power would take the control of Utah affairs out of the hands of officers who are chosen, not by a free selection of the people, but whose nomination is made by "counsel" from the priesthood, and whose election is a mere form, and place it in the hands of men who represent civilized ideas, are in sympathy with the efforts of Congress to suppress polygamy, and will assist the officers of the Government in the work of enforcing the laws, instead of using all the influence and moral support of their positions to nullify the laws, prevent their execution, and shield offenders, as is now the rule and practice.

In regard to the proposed amendment of the immigration laws and the restriction upon the location of public lands the Commission respectfully submits, that while we forbid the immigration of the non-proselyting, peace-loving, docile Chinaman, because we fear a future danger from his coming, while we forbid the landing on our shores of contract laborers, because they cheapen wages of American-born citi-

zens, and paupers, because they may become a burden, there is far greater reason for closing our doors as a nation, and forbidding citizenship to the hordes who are brought here to swell the ranks of an organized body, which teaches them in advance to hate the Government of the United States, denominates its executive, law-makers, judges, and prosecutors as persecutors, and instills into every mind the constant teaching that their pretended revelations are more binding than the highest and best laws of the land, and that resistance to such laws is a virtue and a rendering of obedience to God. How far short of treason these teachings are we leave those who can to answer. By cutting off this importation of generally ignorant and fanatical classes, many of whom neither speak nor care to learn our language, and to say the least are not in sympathy with the institutions or the laws of our country, the principal source of the growth of this conspiracy against what we hold as best and dearest in American civilization would be materially diminished, and the spread of this relic of Oriental barbarism to that extent averted.

The Commission would further suggest, for the careful consideration of Congress, the propriety and expediency of enacting laws providing for the disfranchisement of such persons who may not themselves be guilty of crimes forbidden by law, but who are or may become members of organizations or societies whose tenets and principles are inimical to the Constitution and laws of the country, and teach that the practice of certain criminal acts are virtues, and throws about its members who do practice such crimes the shield of the whole power of such organizations, morally, socially, and otherwise, and to debar them from the privileges of the homestead laws. The Commission does not strenuously urge such legislation at this time, partially because the Supreme Court has not yet passed upon the constitutionality and legality of such enactments.

The Commission yields to none in reverence for and earnest desire to protect from violation every provision of that instrument, sacred to every true American citizen as the palladium of his liberties and the great safeguard of the Republic, but it is not of the opinion that laws made to prevent crime, to prevent combinations and conspiracy against the State, and to punish persons who combine and conspire to commit crime can be called laws which interfere with religion, whether the persons who so combine and conspire call themselves by the name of the Church of Jesus Christ of Latter-Day Saints or by any other name, whether they pretend that their conspiracy is a religion or openly declare their object to be to commit crime.

Religious fanaticism even can not be allowed to commit crimes against the law or to teach others to do so, either by the acts of the individual or an organization composed of many individuals, whether they avow that they act voluntarily or under a pretended spiritual revelation.

The law aims at the crime against society, no matter by what name it is called, or in what guise it is perpetrated. The man who robs you in the guise of a Samaritan is no less a robber because of his disguise.

It may not be considered out of place to mention the fact that similar views to those above expressed have received the sanction and approval of the supreme court of Idaho in deciding the appeal in the case of *Dooley vs. Watkins et al.*, a case in which the principles involved in the suggestion of the Commission are ably discussed.

The Commission desires to commend the governor, the judges, and district attorney and assistants of the Territorial district courts, and the officers of the United States generally for Utah, for the intelligent,

zealous, and faithful manner in which they have performed their difficult and sometimes arduous and distasteful duties in enforcing the laws of Congress, and for the willing and efficient aid they have given the Commission upon all occasions. The utmost harmony exists among all the Government officials in the Territory, so far as is known to the Commission.

In concluding, the Commission is of the opinion that in this matter the Government and Congress should take no backward or even wavering step, but should continue the active and vigorous enforcement of the laws, and the improvement of them by the amendment of such as would be made more effective thereby, and by enacting such other laws as experience may show to be wise and more efficacious to accomplish the desired end, until not only the practice but the inculcation of crimes of this nature shall, as far as possible, be stamped out, and until a majority of the people shall abandon a pretended belief in doctrines which incite to treason against the state, which sap the foundations of society, and retard the growth of nineteenth-century civilization, and until they show that they can be trusted to make and enforce laws which forbid the practices elsewhere universally condemned.

Very respectfully submitted.

G. L. GODFREY, *Chairman.*

A. B. WILLIAMS:

R. S. ROBERTSON.

ALVIN SAUNDERS.

Hon. JOHN W. NOBLE,

Secretary of the Interior, Washington, D. C.

SEPARATE REPORT OF JOHN A. McCLERNARD.

CHICAGO, ILL., *September 23, 1889.*

SIR: While I readily acknowledge the marked ability exhibited by my official associates in their majority report, and while I concur in parts of their report, yet, as I non-concur in its general animus, particularly in its treatment of the distinction between opinions and actions as subjects of legislative punishment, I have deemed it proper, with the leave of my associates, in order to a clear and consistent exposition of my views on the Mormon question, to offer this separate statement of them.

The Utah Commission was created by a law of Congress, approved by President Arthur, March 22, 1882, who, pursuant to its provisions, appointed five persons representing different political parties to constitute it. These persons were appointed from the States rather than from the Territory of Utah, presumably upon the ground that appointments from the States would be least likely to be influenced by the passions and prejudices which have so long disturbed the Territory. The example thus set by President Arthur has hitherto been followed. The only changes made in the personal of the Commission have resulted from appointments made to fill vacancies caused by death or resignation. There has been no instance of removal.

It is evident that the population of the Territory is steadily increasing. As a confirmatory fact it may be stated that the registered voters were:

In 1887.....	19,720
In 1888.....	24,925
In 1889.....	31,201

Since the date of the Commission's last annual report there have been, under the laws, 21 elections in the Territory. At these elections there were 362 persons elected; namely, 1 delegate to Congress, 3 commissioners to locate university lands, 36 members of the legislature, 78 county officers and 244 precinct officers. In connection with these elections the Commission appointed, under the law, 368 registrars of voters, 1,284 judges of elections, and a board for the canvassing of the returns of the elections, which was conducted either directly by the Commission or under its careful supervision. The elections in the two principal cities, Salt Lake and Ogden, showed by their returns a shifted majority in favor of the non-Mormons.

Indulging some general reflections upon the divine economy as affecting the relations of the sexes, I would premise that that economy authoritatively teaches and exemplifies the virtue of order and uniformity, the foundation of the social relations and of civil government. In harmony with that economy, God originally created man and woman, and according to the biblical account, originally created but one man and one woman, Adam and Eve, sole companions of each other in wedlock. According to the same account, Eve was taken from the side of Adam, as bone of his bone and flesh of his flesh.

Upon this postulate, accepted by the Christian church, it may be stated as a matter of curious history, that one of the early reformers of that church, since canonized for his wisdom and piety, argued that as Eve was not taken from Adam's head, neither from his feet, therefore she was not designed to be either his master or his slave, but as she was taken from his left side and from near his heart as the center of life, therefore she was divinely ordained to be his heart-mate and help-mate, his companion and equal.*

The law of generation and population imports the same conclusion, as the operation of that law, under ordinary conditions has, everywhere and at all times, been to produce approximately equal numbers of both sexes, male and female.

The civil law, following the natural and the moral law, likewise treats the woman, except in the arena of contention and publicity, as the equal of the man. It renders each alike amenable to its penalties, and vouchsafes to each the same remedies and redress for injuries and wrongs to person, property, or reputation. It is equally the sword and shield of both.

The marriage covenant follows in the same course which, above all others, is hallowed by time and opinion, by religion and by law. It is couched, on the part of the man, in these solemn and comprehensive terms:

I will take this woman for my wedded wife, to live together after God's ordinance in the holy estate of matrimony. I will love her, comfort her, honor her, and keep her in sickness and in health, and forsaking all other, keep myself unto her so long as we both shall live.

No covenant could be more searching and specific. It bears the double sanction of God and man, and expressly binds the conscience and honor of the husband to its scrupulous and faithful fulfillment. Is it so fulfilled if the husband divides his marital attentions and indulgence between a harem of wives or concubines passing under what name soever? Does he, in that case, manifest true love for his legal and rightful wife? Does he, in that case, honor her, comfort her, and forsaking all other, keep himself unto her? On the contrary he tramples

* St. Augustine de Civitate Dei.

upon his plighted faith, inflicts discomfort and dishonor on her, outrages her womanly instincts, and degrades himself. Nor is it sufficient to answer that she consents, since her consent is insidiously but irresistibly constrained by her associations and surroundings, these serving to dominate her will, to blunt her sensibilities, pervert her understanding, and to virtually enslave her mind and body. As well might it be answered that the consent obtained by undue influence or by duress shall stand against him who is its constrained victim.

Woman's appointed mission is not that of a mere drudge, or merely to adorn man's leisure or to gratify his animal lust. It ranks far higher—comprehensively contemplating her as a companion, the mistress of the home, and the mother of offspring, and in that capacity charged with all the grave and momentous responsibilities arising out of these manifold relations. In brief, she exists for herself as well as for others, and to prepare her to conserve efficiently the happiness of both, she needs early and fitting moral and intellectual culture, training, and discipline. With these she is clothed with an armor against deception and imposture; from these she derives a becoming self-confidence and self-reliance, and, withal, a practical aptness in managing the economies of the home, her natural empire and state.

As mother, she bears her children in sorrow and travail, carries them with trembling arms, in a reaction of bliss, to her breast to nurture them of her strength and sustenance, nurses them in their infancy, follows them with her solicitude, and molds their temper, habits, and character after her own model. If she is intelligent, orderly, and moral, they, by force of her example, will be inclined to be so. If she is coarse, ignorant, and impure, their tendency will be likewise. "As the fig tree looking upon the fig tree becometh fruitful," "so the child looking upon the mother will come to image her." "Give a child to be educated by a slave, and instead of one slave you will have two." "Childhood forecasts the man, as morning shows the day."

It is in childhood those impressions are received which sink the deepest and last the longest. It is then the germs of virtue or vice are implanted, which mature in goodly fruit or deadly thorns; which give shape and color to man's destiny. Napoleon I. deduced from the French revolution of the last century, which mocked female virtue and conjugal fidelity and culminated in the wreck of society and the state, the veracious moral that the need, the great need, of France was orderly homes and self-respecting women.

The mother is the divinely-appointed providence of the human race. From her issue the family and successively the *gens*, the tribe, the people, and the nation. She rules through her affections, the man through his intellect; but as a matter of fact the dominion of the heart is more expansive and enduring than the dominion of the brain. Tersely, in proportion as the mental and the moral qualities of the sexes are developed, so will society, the state, and mankind be improved and elevated. Therefore, the higher education of the woman is as imperatively called for as the higher education of the man.

Companionship in marriage has much to do in assimilating female character. If the husband is ignorant, coarse, and sensual, his association will tend to drag his wife down to his level. If he is oblivious of the claims of virtue, she will hardly be disposed to properly value them, and so, by the example of both, the home and the family will be infected.

The moral law, as we have seen, is no respecter of persons. It applies equally to both sexes. What it condemns in the one it also condemns in the other. Condoning the incontinence of the man, and dis-

honoring the woman for her incontinence, or treating her simply as a unit in a miscellany of wives or concubines is not only unjust and tyrannical, but subversive of good order and society. On the other hand, as the most noble and useful qualities of the woman shine through her affections, her affections deserve to be sympathetically nurtured, honored, and protected. "Without the paternity and consecration of the private and domestic virtues, civic virtues are but an affectation and a sham."

Recapitulating with brief addition: Polygamy is contrary to the divine economy; contrary also to the moral law and to enlightened opinion. It breeds caprice, cruelty, and license. It enervates the man and debauches the woman. Physically, socially, and morally it deteriorates and corrupts. Despotism in the family, it prototypes and engenders despotism in the state. Perforce it works its own retribution, and so it accounts for the unequal development of the Asiatic and European races; for the indolence and feebleness of the one; for the enterprise and energy of the other. Incapacity and inferiority are its label and condemnation. Hence, in the armed contests of rival civilizations, notably in ancient Greece and modern India, it succumbed to the characteristic valor and vigor of represented monogamy.

Following the example of the wisest and most progressive nations, and with them holding fast to the altar of individual purity and self-restraint, as the imperative condition to national esteem, strength, and prestige, the United States have placed the seal of condemnation upon polygamous practices everywhere within the domain of their exclusive jurisdiction. The relevant laws enacted by Congress are numerous and cover a period of nearly forty years. To assist to an easy and ready apprehension of their purport, I subjoin here substantially their pertinent provisions and their familiar popular titles:

The act of 1862 declares, as a rule, that any person having a husband or wife, who shall marry any other person, whether married or single, shall be adjudged guilty of bigamy, and upon conviction thereof, by a jury, shall be punished by fine not exceeding \$500, and by imprisonment not exceeding five years. (Sec. 1.)

The "Poland act" of 1874 provides that in all criminal cases the court and not the jury shall pronounce the punishment under the limitation prescribed by law and withholds from each party more than three peremptory challenges in any criminal case except murder. (Sec. 4.)

The "Edmunds act" of 1882 is more comprehensive, yet more minute. It declares polygamy and unlawful cohabitation severally to be offenses, and defines what shall constitute each; annexes to the one the same penalties enacted by the act of 1862, and to the other a fine not exceeding \$300, or imprisonment not exceeding six months, or both, in the discretion of the court; and allows a joinder of counts for polygamy and unlawful cohabitation in the same information or indictment. (Secs. 1, 3, 4.)

Disqualifies any person from serving as a juror in any prosecution for polygamy or unlawful cohabitation, who is living or has lived in the practice of bigamy, polygamy, or of unlawful cohabitation with more than one woman, or who believes it right for a man to have more than one living and undivorced wife at the same time, or who believes it right to live in the practice of cohabitation with more than one woman, if such person shall be challenged as a juror for any such cause. (Sec. 5.)

Authorizes the President to grant absolute, conditional, or limited amnesty to offenders against either of the above-named acts. (Sec. 6.)

Legitimizes the issue of polygamous marriages solemnized according

to the ceremonies of the Mormon sect, who were born before the 1st day of January, 1883. (Sec. 7.)

Disqualifies any polygamist or other person cohabiting with more than one woman from voting at any election, or for election or appointment to any office of trust, honor, or emolument. (Sec. 8.)

The "Edmunds-Tucker act" of 1887, extending the purview of the previous acts, defines other crimes and misdemeanors with their penalties, namely:

Incest, punishable by imprisonment in the penitentiary not less than three nor more than fifteen years. (Sec. 4.)

Adultery, punishable by like imprisonment not exceeding three years. (Sec. 3.)

Fornication, punishable by imprisonment not exceeding six months or by fine not exceeding \$100. (Sec. 5.)

Waives, in any prosecution for bigamy, polygamy, or unlawful cohabitation, the process of subpoena, for sworn cause, for the process of attachment, instead, to the witness. (Sec. 2.)

Qualifies the lawful husband or wife, each, with his or her consent, to testify as a witness touching the other, in any prosecution for bigamy, polygamy, or unlawful cohabitation, except as to any statement or communication made by either deemed at common law confidential. (Sec. 1.)

Requires every celebration of marriage performed in Utah to be signed by the parties thereto, and by every priest or other person taking part therein, and that the evidence of marriage when so authenticated shall be filed in the office of the probate court for record, and that such record shall remain subject to inspection, and punishes any willful violation of the requirement by fine not exceeding \$1,000, or by imprisonment not exceeding two years, or by both, in the discretion of the court. (Sec. 9.)

Vests in the commissioners who are or may be appointed by the supreme court or district courts in the Territory the same powers and jurisdiction possessed by the justices of the peace therein, or by the commissioners appointed by the circuit courts of the United States. (Sec. 7.)

Continues the powers and duties of the Utah Commission until it shall have been superseded by the legislative assembly of the Territory with the express approval of Congress. (Sec. 23.)

Abolishes the right of female suffrage for any public purpose (sec. 20), and limits the right of male suffrage by the precedent condition that such person shall have registered his name as a voter and subscribed an oath or affirmation that he is over twenty-one years of age; has resided in the Territory six months and in the precinct of his residence one month—including in such oath or affirmation a statement, according to the fact, that he is a native-born or naturalized citizen, of his age, his place of business, his status, whether single or married, and if married, the name of his lawful wife; that he will support the Constitution of the United States and faithfully obey the laws thereof, and especially the act of 1882 and this act in respect to the crime therein defined and forbidden, and will not, directly or indirectly, aid or abet, counsel or advise any other person to commit any of said crimes. (Sec. 24.)

Disqualifies any person to serve as a juror or to hold any office who shall not have first taken an oath or affirmation setting forth his full name, his age and place of business, his status, whether single or married, and, if married, the name of his lawful wife, and that he will support the Constitution of the United States and obey the laws

thereof; or who shall have been convicted of any crime under the act of 1882 or this act. (Sec. 24.)

Regulates and secures the right of dower (sec. 18); makes the judges of the probate courts appointive by the President, by and with the advice and consent of the Senate (sec. 19); requires the governor and the secretary of the Territory, with the Utah Commission, to redistrict the Territory into representative and councilor districts, and to apportion the representation of the people of the Territory in proportion to their numbers and the number of the districts and of the members of the present legislative assembly. (Sec. 23.)

Provides the agencies and mode of forfeiting and escheating to the United States, for the use of common schools, the property of corporations obtained or held in violation of the act of 1862, except buildings, with their appurtenant grounds, held and occupied exclusively for the worship of God, or for the parsonages connected therewith, or for burial places. (Secs. 13, 14.)

Disapproves and annuls all laws of the legislative assembly of the Territory, or of the so-called State of Deseret, creating, organizing, amending, or continuing the corporation called the Perpetual Emigration Company, and, dissolving it, provides the mode and agencies of adjudging its dissolution and of carrying the same into effect. Forbids the assembly from passing any law operating to bring persons into the Territory; and escheats the property and assets of the corporation, in excess of its lawful liabilities to the United States for investment and disposition, by the Secretary of the Interior, for the benefit of common schools in the Territory. (Secs. 15, 16.)

Disapproves and annuls all acts of the legislative assembly of the Territory; also the ordinance of the so-called state of Deseret incorporating, continuing, or providing for the corporation known as the Church of Jesus Christ of Latter-Day Saints; disincorporates and dissolves that corporation; vests the supreme court of the Territory with equity power to wind up the affairs of the corporation conformably to law, and to carry all these provisions into effect, and, in so doing, to cause to be transferred to trustees, for the use of the corporation, the real estate now held and used by it for places of worship, and for parsonages connected therewith, and for burial grounds, subject to the limitation imposed in that regard by sections 13 and 26 of the act. (Secs. 13, 17, 26.)

Suspends the laws of the Territory providing the method of electing and appointing the Territorial superintendent of district schools; abolishes the office of such superintendent, and makes it the duty of the supreme court of the Territory to appoint a commissioner of schools, clothed with the same powers and charged with the same duties appertaining to the Territorial superintendent under the laws of the Territory; clothed also with the power to prohibit the use of any book of a sectarian character or otherwise unsuitable in any district school; and charges him also with the duty of reporting annually to Congress, through the governor of the Territory and the Secretary of the Interior, concerning the number of children of school age, the proportions attending and not attending school, and generally of the progress of the schools and the operation of his office. (Sec. 25.)

It annuls all laws passed by the so-called state of Deseret or by the legislative assembly of the Territory for the organization of the militia or the creation of the Nauvoo Legion, and provides that the militia of Utah shall be organized and subjected in all respects to the laws of the United States, and that the governor of the Territory, by and with

the advice and consent of the council thereof, shall appoint all general officers of the militia, until, as further provided, the assembly shall have passed other laws for organizing the militia, subject to the approval of Congress.

These laws are far-reaching and stringent. They bespeak an unusual remedy for an obstinate and formidable evil. They extend to all offenders convicted of violating them not only the penalty of fine and imprisonment, or both, but forfeiture of the elective franchise and eligibility to hold office or to perform jury service. More than that, they cautiously require, even of non-offenders, a test oath involving divers unusual precedent conditions to the exercise of the elective franchise or to the holding of office or serving as a juror.

Now, have these laws proved uniformly and effectively remedial? Facts and enlightened opinion should afford the best answer. From the date of the act of 1862 to 1875, nearly thirteen years, there does not appear to have been a single conviction for bigamy or polygamy, although in that time these crimes were rife; and it is scarcely less remarkable that from 1875 to 1884, eight more years, there appears to have been but two convictions, totalizing only that number of convictions for twenty years.

Again: Why this absence or paucity of conviction for so long a period? The explanation derived is that the courts were generally considered powerless to reject a juror on challenge for religious bias as to the issue, or to summons a provisional jury to find indictments or verdicts which the regular jury had rejected or otherwise improperly failed to find.

The effect of this assumption was confusing to the courts and obstructive to the course of justice. It contributed to strengthen and confirm the belief of the Mormons, that polygamy as a tenet of their religion was intrenched by the Federal Constitution, and was therefore inviolable to any law that Congress was competent to pass, and so encouraged and emboldened them in persistent polygamous practices. But later the assumption was overthrown; in the one case by the Supreme Court of the United States;* in the other, by a district court of the Territory,† which asserted the reasonable doctrine that it belonged to the inherent power of the court to provide itself with the agency of a jury when it became necessary in order to the fulfillment of its functions.

These rulings opened the way for the actions of the laws to correct a misapprehension which then appeared to be common to the local majority. Twenty-one convictions for bigamy or polygamy followed in the six years succeeding 1883, whereas there were but two convictions occurring in the twenty years preceding 1884. This disparity is the more notable inasmuch as these offenses have been decreasing since the enactment of the Edmunds law of 1882. The statement is significant as illustrating the vigilance and vigor with which the laws prohibiting polygamy have been executed for the last six years.

The greatest number of convictions had for sexual offenses since 1883 was for unlawful cohabitation, a misdemeanor created and made punishable by the act of 1882, which was presumably designed, at least in part, to prevent the actual survival of the polygamous relation after the statute of limitations barred a prosecution for it, in form, as polygamy. And here it may be pertinent to inquire whether, as polygamy is in fact an offense against society and not merely a breach of a valid marriage contract, it should not be liable to punishment as long as the

* Reynolds v. U. S., 98 U. S., 162.

† Judge Zane sitting.

sexual relation it implies actually exists? To shield it by a limitation applicable to a civil contract is a waiver of that liability, and is, in a logical sense, inconsistent. To spare that punishment because it has grown chronic and contumacious is to encourage it. For the stronger reason, in that case it should be punished, and the more severely.

Among the people of northern and western Europe, as well as among the people of the United States, polygamy as an institution or practice has always been odious. Until its introduction here by the Mormons it had been regarded as appertaining almost exclusively to the Asiatic and African marital and social condition. Certainly before that time it had no other than a sporadic and fugitive existence in our land.

From the earliest history of England, the mother country, the offense was treated as one inimical to the well-being of society, and a statute of James I. denounced it as a felony punishable with death, if committed in England or Wales. In 1788 Virginia re-enacted substantially the same statute, including the death penalty, and since then it may be safely affirmed that there has never been a day in any State in the Union when polygamy was not cognizable as a crime by the civil courts and was not punishable with more or less severity.

Recurring to the subject of actual decline of polygamous offenses, as already noticed, it is proper to remark that that fact carries with it a pregnant and welcome moral significance. It means the birth of a reformatory spirit and its advancing development. This truth is variously evidenced.

Five or more years back the leading anti-Mormon journal in Utah, the Salt Lake Tribune, bore this testimony :

Salt Lake City is so changed from the Utah of ten years ago that, could the old state of affairs be restored for a week, the old slavery, the old tyranny, and the restrictions, the Mormons themselves would rise up in rebellion. There are forces at work in Utah which are all-powerful and which no artifice or restriction, no falsehood, and no superstition can resist.

In 1887 a convention of delegates, chosen with singular unanimity by the Mormon voters of Utah, framed and composed a constitution of government, under which the admission of Utah, as a State, into the Federal Union was prayed. It incorporated as a part of it the following provisions :

ART. I, SEC. 3. There shall be no union of church and state, nor shall any church dominate the state.

ART. XV, SEC. 12. Bigamy and polygamy being considered incompatible with a republican form of government, each of them is hereby forbidden and declared a misdemeanor.

Any person who shall violate this section shall, on conviction thereof, be punished by a fine of not more than one thousand dollars, and imprisoned for a term of not less than six months nor more than three years, in the discretion of the court. This section shall be construed as operative without the aid of legislation, and the offense prohibited by this section shall not be barred by any statute of limitations within three years after the commission of the offense, nor shall the power of pardon extend thereto until such pardon shall be approved by the President of the United States.

ART. XVI, SEC. 1. Any amendment or amendments to this constitution, if agreed to by a majority of all the members elected to each of the two houses of the legislature, shall be entered on their respective journals, with the yeas and nays taken thereon, and referred to the legislature then next to be elected, and shall be published for three months next preceding the time of such election; and if, in the legislature next elected as aforesaid, such proposed amendment or amendments shall be agreed to by a majority of all the members elected to each house, then it shall be the duty of the legislature to submit such proposed amendment or amendments to the people in such manner and at such time as the legislature shall prescribe, and if the people shall approve and ratify such amendment or amendments by a majority of the qualified electors voting thereon, such amendment or amendments shall become a part of the

constitution: *Provided*, That section 12 of Article XV shall not be amended, revised, or in any way changed until any amendment, revision, or change, as proposed therein shall, in addition to the requirements of the provisions of this article, be reported to the Congress of the United States and shall be by Congress approved and ratified and such approval and ratification be proclaimed by the President of the United States, and if not so ratified and proclaimed, said section shall remain perpetual.

Not only were these provisions incorporated in the proposed constitution, but they were submitted with it for adoption or rejection by the qualified electors of the Territory at the general election in the ensuing August. The returns of the election showed 13,195 votes in favor of the constitution and only 504 against it.

Now, whether these provisions, as restrictions upon the right of local self-government and as calculated to produce a condition of political inequality among the States, are consistent with the rights of the States and the Constitution of the United States, and whether, therefore, it would be competent to admit Utah under her proposed constitution, are grave questions of constitutional law, determinable only by the highest appropriate civil authority.

In August, 1887, Hon. Charles S. Zane, judge of the third district court, and chief-justice of Utah, answering certain relevant questions, said that, in his opinion, the then existing laws diligently and strictly enforced, might be reasonably relied on to work the cessation of polygamous practices, and that no case of polygamy coming under his judicial notice had originated in the commission of that crime since the date of the Edmunds-Tucker act. And the late Hon. William G. Bowman, then Surveyor-General of the United States for the district of Utah, substantially corroborated the foregoing statement as to the efficacy of the laws.*

While the act of 1882 disqualifies any polygamist or other person cohabiting with more than one woman for election or appointment to any office or place of trust, honor or emolument, the act of 1887, extending further, requires as a precedent condition to the exercise of the elective franchise, that the elector shall take an oath which may be described as a test of loyalty to the United States and obedience to its laws.

This oath was formulated by the Commission in adherence to the language of the act as closely as practicable. It is as follows:

TERRITORY OF UTAH, County of _____:

I, _____, being duly sworn (or affirmed), depose and say, that I am over twenty-one years of age; that I have resided in the Territory of Utah for six months last past, and in this precinct for over one month immediately preceding the date hereof, and that I am a native born (or naturalized as the case may be) citizen of the United States; and that my full name is _____; that I am _____ years of age; that my place of business is _____; that I am a (single or) married man; that the name of my lawful wife is _____, and that I will support the Constitution of the United States and will faithfully obey the laws thereof, and especially will obey the act of Congress approved March 22, 1882, entitled "An act to amend section 5352 of the Revised Statutes of the United States in reference to bigamy, and for other purposes," and that I will also obey the act of Congress of March 3, 1887, entitled "An act to amend an act entitled 'An act to amend section 5352 of the Revised Statutes of the United States in reference to bigamy, and for other purposes,' approved March 22, 1882," in respect of the crimes in said act defined and forbidden, and that I will not, directly or indirectly, aid or abet, counsel or advise, any other person to commit any of said crimes defined by acts of Congress as polygamy, bigamy, unlawful cohabitation, incest, adultery, and fornication.

Although the person applying to have his name registered as a voter may have made the foregoing oath, yet if the registrar shall, for reasonable or probable cause, believe that the applicant is then in fact a big-

*See Appendix, Notes B and C.

amist, polygamist, or living in unlawful cohabitation, or associating or cohabiting polygamously with persons of the opposite sex, or has been convicted of bigamy, polygamy, unlawful cohabitation, incest, adultery, or fornication, in our opinion, the registrar may require the applicant to make the following additional affidavit:

TERRITORY OF UTAH, *County of* ——— :

I, ———, do further swear (or affirm) that I am not a bigamist, polygamist, or living in unlawful cohabitation, or associating or cohabiting polygamously with persons of the other sex, and that I have not been convicted of the crime of bigamy, polygamy, unlawful cohabitation, incest, adultery, or fornication.

It was predicted of this oath by many of the non-Mormons of Utah that the Mormons would not take and subscribe to it, yet with some exceptions, including refusing non-Mormons, the Mormon electors did so. The acceptance of the test by the body of the Mormon electors is here noted as one of the most hopeful tokens of Mormon reform. It implies a split between young and progressive Utah and the old Utah, unhappily still surviving in individual instances of incorrigible fanaticism and fatuity.

To the objection made by a committee composed of leading non-Mormons, that the oath as formulated was not sufficiently comprehensive and searching, the commission answered that it was according to the law and fulfilled it.

The local municipalities of Utah comprise no inconsiderable portion of its population. Formerly, under the Territorial law, the aldermen and councilmen of these municipalities were elected by the voters at large of the municipalities. The result was that the Mormons, being in the majority, elected all their candidates and controlled the municipal administrations. This provoked complaint by the non-Mormons, especially in Salt Lake City, where they contributed largely in taxes to the municipal revenue. To satisfy this complaint the Mormons of that city proposed the election of a fusion ticket of Mormons and non-Mormons for the city at the then pending election. The proposal was accepted by some of the non-Mormons, but was rejected, perhaps by a considerable majority of them. What was thus in this case personally and provisionally arranged was shortly afterward followed by an act of the legislative assembly authorizing local representation in municipal government by means of separate precinct or ward elections.*

At the same session of the legislative assembly, 1888-'89, various laws were passed manifesting a quickening and intelligent appreciation of social and civil responsibility and duty. Among them is a law to punish and prevent gaming; a law auxiliary to the laws enacted by Congress to prevent by severe penalties crimes against the elective franchise and to secure the purity of the ballot-box; a law to equalize taxes; a law enlarging and improving the accommodations of an insane asylum; a law establishing an institution for deaf mutes; a law requiring among other conditions to the sale of intoxicating liquors payment of a license tax of not less than \$600 nor more than \$1,200, and limiting the life of the license to one year; a law for acquiring Territorial fair grounds, and for erecting suitable buildings thereon; a law to establish an agricultural college with an experimental appendage, and a law in aid of an orphans' home.†

Besides these laws, the same assembly passed a joint resolution pledg-

* Act for incorporation of cities, March 8, 1888.

† Session Laws, 1888, pp. 10, 15, 49-55, 77, 82, 193, 209, 215, 222.

ing its adherence to the laws of the United States penalty prohibiting polygamy and other sexual offenses. It is in these words:

This assembly are in favor of a just, humane, and impartial enforcement of said laws * * * in the same manner that other criminal laws are enforced, under the Constitution and laws of our country, to the end that such offense may be efficiently prohibited.*

This resolution as an authentic expression of the Mormons of Utah, through their chosen representatives, upon a long-controverted question, challenges especial attention as an auspice of reconciliation and submission to authority.

On the same general line the assembly passed a law, elaborately and lucidly developed, "regulating marriage" and apparently anticipating every condition which should tend or operate to validate or invalidate the marriage contract.†

The Utah of to-day is peaceful and prosperous. Personal and property rights are secured by wholesome laws properly enforced. Taxes are light in the rural districts, and comparatively light even in the larger incorporated cities. Exemplary sobriety prevails as the rule, and industry is active alike among the non-Mormons and the Mormons. The mountains are pierced by the pick and the drill for the outflow of their treasures of gold and silver, of copper and lead, and of coal and iron, while their ridges and sides are roamed by thronging herds of sheep, cattle, and horses, which graze their herbage and grasses and grow fat. The valleys are shedding their tangled brakes of sage-brush for comely fields of wheat and rye, of barley and oats, or for vines and orchards bearing delicious fruits.

The esculent Irish potato grows well, and for its size and excellence is in request in San Francisco, Denver, Chicago, and even foreign markets. Of the domestic grasses, the alfalfa (Lucerne) grows the most luxuriantly, yielding several crops in the same season, while the hay yield of timothy is fair and of fine quality; but conditional to all these productions is artificial irrigation by means of canals and ditches costing much labor and painstaking.

Salt Lake has become a popular resort for bathing and sanitation, and for several years waters drained from it into near depressions have been reduced by solar evaporation to crusted salt, finding in large quantities profitable markets in the mining districts. Salt Lake City, the capital of the Territory, contains a population of 30,000 or more, with many fine and costly public and private buildings, and visited annually by multitudes of tourists from different parts of the United States and Europe, has become eminently cosmopolitan. Ogden is a busy and rising commercial center, reaching by rail to the far East, West, North, and South. Provo, overlooking Utah Lake and the Jordan River, is an extensive market for raw wool and the seat of an extensive manufactory of plain and fine woollen goods, capable of competing in the most critical markets of the country. Withal, there is a university of learning, a system of public schools, and private academies of different religious denominations.

This is a sketch of the Utah of to-day. Contrasting it with the wild, rude, mountain-buttressed seclusion of the Utah of thirty years ago, with the fanaticism, violence, and terrorism of that period, how striking, even marvelous, the metamorphose:

Look on this picture and on this.

But to say that this change is solely the effect of the enactments of

* Session Laws, 1888.

† See Appendix, Note D, for literal or substantive extracts of the law.

Congress is inaccurate and misleading. True, these enactments have effected much, yet it has been mines, mills, smelters, railroads, and the press, in short, the accumulating and intensifying agencies and energy of general progress and improvement, educational and material, which have added alike to their persuasion and force.

Still, a report of recent date came to the Commission from some of its appointees as registrars that they had information reasonably leading them to believe that 29 persons had entered into polygamy from June, 1888, to June, 1889. A report of about the same number of alleged offenders was made last year, both and all such reports being made under an early rule of the Commission tacitly waiving the publication or reference of such reports to the law officers of the Territory, and so lessening their usefulness or value as against crime. Howbeit, as to the fact reported, there have been only six convictions for bigamy or polygamy, according to the report from the district judges, in the last year and so far in the present year; still it is possible, nay in some measure probable, that the reports are true. Indeed, it would be strange if they were not. A radical reformation of ideas, habits, especially of religious opinions, always incurs the friction of disagreement; yet, if armed with right and justice, it will roll on irresistibly to its fulfillment. This is the normal law of reformation or revolution both in church and state. Concurrently the laws should be inflexibly enforced. No step backward should be tolerated.

On the other hand the Mormons, qualified under the law to vote and hold office, complain that the Commission, from the first, has uniformly excluded them from appointment as registrars wherever qualified non-Mormons could be found willing to accept. And they complain that in that way, contrary to the letter and intent of the law, and to a policy promotive of reform, they have been discriminatively and invidiously proscribed for no other cause than their religious opinion.*

Finally, the local discussion of particular laws is resolving itself into an abstract discussion of the respective limits of the civil and ecclesiastic authority of the immunity of opinion and the responsibility of acts. The discussion, taking this form, involves an old question, which, debated for generations by speech, by the pen and the sword, issued in a conclusion more theoretic than consistently practical. The conclusion, generally stated, is that the legislature, within its organic competency, is the primary judge of what concerns the temporal welfare of the individual, of society, and the state, and that its judgment in that respect, within its organic competency, is exclusive and determinate.

On the other hand, the conclusion is that opinion, or belief, whether religious or secular, is a natural and inalienable right, sacred against legislative coercion or intrusion. It is in virtue of this recognized distinction that the laws enacted by Congress, penally prohibiting sexual offenses, have been upheld by the Supreme Court of the United States,† and that the laws, either temporal or spiritual, punitive or coercive of opinion, have been adjudged void. This is the distinction of reason and right—the distinction crystallized and made salient in our constitution of government, and cherished as the apple of the eye by the American masses.

Jefferson said "that the opinions and belief of men depend not on their will, but follow voluntarily the evidence proposed to their minds; that Almighty God hath created the mind free, and manifested His supreme will that free it shall remain by making it altogether insus-

* See Appendix, Note E.

† *Murphy v. Ramsey*, 114 U. S., 15, 44.

ceptible of restraint; that all attempts to influence it by temporal punishment or burdens, or by civil incapacitations, tend only to beget habits of hypocrisy and meanness, and are a departure from the plan of the holy Author of our religion; that our civil rights have no dependence on our religious opinions any more than on our opinions in physics or geometry; "that the opinions of men are not the object of civil government."

Madison sententiously said: "Religion, or the duty we owe to the Creator, is not within the province of civil government."

Hamilton said: "If the legislature can disfranchise any number of citizens at pleasure by general descriptions, it may soon confine all the voters to a small number of partisans and establish an aristocracy or oligarchy. If it may punish at discretion all those whom particular circumstances render obnoxious, without hearing or trial, no man can be safe, or know when he may be the innocent victim of a prevailing passion. The name of liberty applied to such a government would be a mockery of common sense."

Five States, while adopting the Federal Constitution, proposed amendments. Three—New Hampshire, New York, and Virginia—included, in one form or another, a declaration of religious freedom in the changes they desired, as did also North Carolina, whose convention at first declined to ratify the Constitution until the proposed amendments were acted upon. Hence, answering these and other expressions of States, statesmen, and the people, the Constitution in its original text, and in its amendments, was adopted, the object of its adoption being, as declared in its preamble, to "secure the blessings of liberty to ourselves and posterity." As vital to that end, the original Constitution provides that "no religious test shall ever be required as a qualification to any office or public trust under the United States;" and Article I of the amendments declares that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press."

The Supreme Court in expounding and applying certain of these provisions, in its opinion delivered by Chief-Justice Waite, makes plain the distinction between opinion as a mental act and the outbreak of opinion as a physical act, injurious to society and prohibited by law. The court says:

Laws are made for the government of actions, and while they can not interfere with mere religious belief, they may with practices. * * * Congress can not pass a law for the government of the Territories which shall prohibit the free exercise of religion. The first amendment to the Constitution expressly forbids such legislation. Religious freedom is guaranteed everywhere throughout the United States so far as Congressional interference is concerned.*

The Edmunds act of 1882, in unison with this judicial exposition, declares that the Utah Commission "shall not exclude any person otherwise eligible to vote from the polls" or "refuse to count any such vote on account of the opinion of the person casting it on the subject of polygamy or bigamy." (Sec. 9.)

In conformity with these canons, thus variously propounded, the Commission has from time to time officially assured the Mormon people domiciled in Utah that the Government of the United States had no design to coerce them for their church membership, or their religious opinions, and that all that was required or could be rightfully required of them was to obey the laws.

* Reynolds vs. U. S., 98 U. S., 162-3.

In the Commission's first annual report, 1882, it said:

The legislation of Congress as we understand it is not enacted against the religion of any portion of the people of this Territory. The law under which we are acting is directed against the crime of polygamy.

In its report of 1883 it said that—

By abstaining from the polygamic relation they [the Mormons] will enjoy all the political rights of American citizens.

In its report of 1886 it said:

We recognize the obligation of the Government of the United States to protect the personal and property rights of the Mormon people, and to deal with them as equals before the law, yet it is equally the duty of the Government to punish crime.

Again, in its circular of March, 1887, to election officers, it said, after enumerating all the disqualifications of voters—

That no opinion which they (the Mormons) may entertain upon questions of religion or church polity should be the subject of inquiry or exclusion from the polls.

But this limitation, while shielding the elector, does not necessarily include the juror, the nature of whose functions imperatively requires of him judicial impartiality. Hence the law of 1882 wisely and conservatively provides that any one offered as a juror in a prosecution for bigamy, polygamy, or unlawful cohabitation under a statute of the United States, who believes the acts constituting these offenses right, shall, for such cause, upon challenge, be rejected.

With this record of historic names and wisdom and of the organic and municipal law of the land outstretched before us, what addition to it, if any, does experience now admonish?

Answering this question, I would respectfully recommend an amendment to the Federal Constitution perpetually prohibiting polygamy under whatsoever its guise, not only in the States, but also in the Territories and other places over which the United States have or may have exclusive jurisdiction.

The importance of such an amendment can not be overestimated. I would draw under a common and uniform civil cognizance the conditions of marriage and divorce, with the evidence and the authentication of the evidence of their verity, and thus subserve convenience and certainty in respect of the paramount feature of social life. Moreover, it would draw under the same cognizance the question of monogamy and polygamy, upon the dual terms of which in the one case turns the capacities of individual, social, and national development, and, in the other, turns the deadening and corrupting influence of the patriarchal principle and stationary despotism.

It would substitute a lasting organic law for a fugitive legislative enactment, which must cease to operate with the cessation of the anomalous Territorial condition.

It would raise an inferred and parasitic power, obscurely deduced from another power, administrative in its terms, and pointing directly to the disposal of property, to the dignity and distinctness of an expressed power.

It would inure as a solemn, deliberate, and final repudiation in this country of the Asiatic and African pestilence, polygamy.

It would be an authoritative and conclusive notification to immigrants from every land that the United States are dedicated to the virtues and blessings of monogamy, and, not least, the amendment, passing as a lesson into the common and higher schools of the land, would form and train the minds of generations in accord with its spirit and reason.

The material prosperity of a community generally depends upon the

tillage of the soil. It was the commandment of the Creator to man that he should go forth and till the soil and live by the sweat of his face. Hence, whatever concerns the fulfillment and fruition of that commandment is of the first importance.

This premised, the question arises, what disposition of the public lands in Utah would best subserve the purposes and interests of that law?

To answer this question intelligently and usefully, it is requisite to advert to the extent of the Territory, to its natural features, to its climate and mineral resources.

Its length, north and south, is 325 miles. Its breadth, east and west, is 300 miles. It lies between the 37th and 42d parallels, north, and the 109th and 114th meridian west, Greenwich.

Total area	square miles..	87,750
Divisible—lands	do	84,970
Divisible—water	do	2,780
Divisible into acres—land		52,601,600
Divisible into acres—water		1,779,200

Total acres land and water	54,380,800
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Proportion of mountains	per cent ..	88
Proportion of valley	do	12

The climate is rarely rigorous, and generally exhilarating and salubrious. This is witnessed by the noticeable physical development of the whites.

The out-put of certain mines for the calendar year 1887 was :

Of gold	\$220, 000
Of silver	7, 000, 000
Total	7, 220, 000

Of the copper and coal products, I am only prepared to say generally that they were considerable and are increasing.

Commonly the presage of rain is delusive and the rain-fall deficient. On the whole, the region is naturally dry and arid. The snow-fall is the chief reliance for water, fertilization, and sustenance of vegetation. Artificial irrigation has been availed of, but, for lack of capital with the farmers, only in a desultory and imperfect manner. This fact, opening a field for speculation in lands and water rents, is engaging the attention of moneyed corporations and syndicates, but with a dubious prospect of ultimate advantage to settlers. The urgent need is a comprehensive and scientific plan of irrigation. There should be no waste of water.

As far as may be found advantageously practicable, waters of the rivers, lakes, cañons, and other mountain torrents should be made tributary to capacious and durable reservoirs for regulated distribution for all needful purposes.

Such a scheme appeals to the favor of Congress for economic and other reasons. As an efficient and suitable means of accomplishing it, I would respectfully suggest the cession of the unappropriated and unreserved lands of the United States in Utah for that purpose, under a compact concurrent with the eventual admission of the Territory as a State, and guarantying the application of the proceeds of the sales of the lands, or a reasonable annual tax thereon, to insure its faithful execution. I would further suggest the extension of such a scheme to the other arid Territories and the new States of the West, placing all the communities of the arid region upon the same level of advantage.

Under the operation of such a scheme the area of profitable production would be greatly increased. Comparably it would be greater than the arable area of the six New England States, and capable of sustaining a more numerous population. The effect in relation to the Mormon imbroglio would not be uncertain. Taking form in an influx of immigrants of predominating numbers and influence from the old States, the end of polygamy where it exists in the incipient States and the Territories would be irresistibly hastened and assured. In fact, the shortest way to the end of that evil lies in such a scheme.

The advantage of irrigation has been conclusively demonstrated. Rainless Egypt affords a striking and apposite example. With a narrow strip of land actually cultivated, containing less than 5,000,000 acres bisected by the Nile and irrigated by its annual overflow, she even now, in her decay and despair, finds a resource capable of sustaining its 4,000,000 occupants and of supplying an annual tribute in taxes amounting to millions to her foreign creditors, showing that the proportion of land in acres to the population is as one acre and a fraction of an acre to each occupant. The fact seems incredible, yet it is well attested.

That resource affords the key to the conspicuous part played by Egypt in the ages of her power and prestige; to her armed conquests; to her lavish expenditures, evidenced by her colossal pyramids; to her convergence of the ancient lines of commerce upon Thebes and Cairo, upon Bagdad and Alexandria; to her antique yet mystic lore, which, borrowed and purged by the versatile Greeks of its sinister expression, became successively the beacon-light of the letters and literature of the pagan and Christian world.

The law creating the Commission, providing, as we have seen, for the representation of different political parties in its composition, plainly intended that it should be administered with judicial fairness and impartiality—in a non-partisan spirit. Dealing with the elective franchise and eligibility to office, elemental to republican government, it could hardly have been otherwise. Guided by the law and its intent, I have abstained from wresting either, while I have faithfully endeavored to give due effect to both.

I have already said that the existing laws are working well, and have cited accumulated proofs of the fact. To "let well enough alone" is a wise and safe rule. I would therefore recommend general adherence to it. Further aggressive legislation trenching further upon civil and political privileges would be injurious rather than beneficial. It would be regarded by the people affected as revolutionary and despotic. Savoring, under the circumstances, of persecution for religious opinion, it would provoke resentful feelings, an obstinate and reactionary mood. Such has been the effect of such legislation in all like cases. No religion was ever finally destroyed by either armed or unarmed proscription. "The blood of the martyr is the seed of the church."

The Mormon religion purged of its impurities will probably survive, how long no one can foresee. Its votaries, impelled by the zeal characteristic of a new sect, are active propagandists. Its vices, however, like those distorting any other system, must be amenable to the corrective laws of progress and intelligence. Civilization is a sublime revelation, modifying, improving, and elevating the yearnings of the human heart and mind. The ages of that fanaticism and fatuity which contrived the inquisition and the rack; which invented the medieval writ *de heretico comburendo*; which burned Latimer and Ridley at the stake; which inflicted the massacre of St. Bartholomew; which ruthlessly ex-

terminated dissenters from orthodoxy in the Netherlands, and which drove the Puritans, the Huguenots, the Quakers, and their co-devotees to the cause of freedom in their native lands to find refuge in the New World, and to people it with teeming millions, and to bless it with republican principles and forms—those ages have passed away. To revive their dark and intolerant spirit now, in the nineteenth century, would add another proof and lament that the course of nations is not upon straight lines, but in wayward circles, ending where they began and rebeginning where they ended. The commentary of the philosophical historian would not be doubted. Passing the dismal panorama of reaction before him, he would not spare just censure upon whomsoever or whatsoever it should fall.

JOHN A. McCLEARNAND.

Hon. JOHN W. NOBLE,
Secretary of the Interior, Washington, D. C.

REPORT OF THE GOVERNMENT DIRECTORS OF THE UNION PACIFIC RAILWAY COMPANY, 1889.

BOSTON, *December 18, 1889.*

SIR: The board of Government directors of the Union Pacific Railway Company respectfully submit the following:

The general condition of the Union Pacific Railway Company and the financial results of the year are very satisfactory. During the early months there was a considerable decrease in the net earnings, due to causes which to a greater or less extent affected the earnings of every railroad west of the Mississippi. The later months have shown an increase which will make the result for the whole year somewhat better than that of 1888. As the returns for the year will not be complete for several months, it is impossible at the date of this report to present any exact statements in regard to results, but these will be presented in the annual report of the directors in great detail.

This board believes that it would be entirely superfluous for it to enter upon any elaborate argument in favor of a definite settlement of the subsidy debt of this company to the Government. The absolute necessity for such action has been demonstrated so clearly by previous boards of Government directors, by United States Railroad Commissioners, by Congressional committees, by a special commission appointed by the Government to investigate the subject, and by the late President of the United States; that further discussion on this point would be merely a waste of time and effort. It is, then, a well-established fact that the provision made by existing law for the extinguishment of the debt is entirely inadequate. It is also proven beyond question that on July 1, 1897, which is the average date of maturity of the subsidy bonds, the Government will hold a claim against this company utterly beyond the corporation's power to pay, and utterly beyond the Government's power to satisfy through a foreclosure of the statutory lien which it holds on a portion of the road. Such being the case, the only question for consideration is simply one as to the method of effecting a settlement.

This question, in the opinion of the directors, has been answered thoroughly and successfully in the bill (No. 8184) reported unanimously to the House of Representatives of the Fiftieth Congress by the Committee on Pacific Railroads, and also reported (Senate bill No. 3401)

in like manner by a special committee of the Senate of the same Congress. This measure, commonly known as the "Outhwaite bill," is based upon two general principles, that have been observed in all recommendations made on the subject by previous boards of Government directors. These principles are, first, that the settlement of the debt should be upon a basis of greater security to the Government, and which should be within the ability of the company to meet; and, second, that when the settlement should be made, the present relations of the Government to the current management of the road should cease; the United States assuming its true function, that of a creditor to the road, and the road continuing to act as a debtor, but without those hampering influences that are now involved by the Government's quasi partnership in its business management.

The Government directors do not hesitate to recommend specifically the passage of this bill. Representing as it does the result of the most careful investigation of the subject on the part of various bodies of able and distinguished public officials, we consider it the best expression of the general proposition for refunding the debt that has yet been given, and we believe that its practical workings will prove satisfactory to the Government and to the company. The various strong reasons urging its enactment are apparent to any one who makes even a casual examination of its provisions.

In the first place, it not only gives the United States a large amount of additional security for the debt, but in substituting a mortgage covering the entire property of the company for the purely statutory lien, with all its inseparable uncertainties and difficulties, held by the Government upon a fragmentary portion of the railroad, it furnishes a security far superior in character in every respect to that now held by the Government. What the precise value of this additional security is we do not feel called upon to decide. It is variously estimated at from \$35,000,000 to \$70,000,000. But, whatever it is, it represents the company's entire property, and this is all the road has to offer. It is the belief of this board that in view of the present condition of the company and its excellent prospects, the proposed security is entirely adequate, and will insure the payment of every dollar due the Government before the time (fifty years) for which the mortgage is given shall have expired.

Under the proposed law all the vexatious controversies between the United States and the company, such as have occurred under existing laws, will cease; all questions as to the investment of the sinking fund are ended, the Government being relieved from all trust obligations to the company. In making the Government an ordinary creditor, the company is left free to attend to its own business and to develop its system and territory untrammelled in its efforts so long as the provisions of the act are carried out. With its increased and improved security, with the gradual reduction of the debt, with the provision for foreclosure constantly ready to act, the Government can well afford to let the company conduct its own affairs.

The roads physical condition, which has been the subject of a careful personal investigation by members of this board within the past few weeks, is very satisfactory. The system of constant betterment, that is, improvement in excess of ordinary maintenance, which was begun by the present management at the inception of its work, has been continued with vigor and energy during the year. All portions of the property—tracks, road-beds, bridges, stations, rolling stock, and motive-

power—afford conspicuous evidence of the thorough manner in which this sound and far sighted policy has been carried out.

In conclusion, we consider it entirely fitting, and part of our duty as Government representatives, to express our confidence in the ability, honesty, and purposes of the road's present managers. During the five years that they have administered the affairs of the company there has been displayed by them constantly such a wisely-directed energy, such a faithful persistency in the face of the most discouraging obstacles, such an honorable determination to place the road in its right relation with the public and the Government, as to call forth the warmest praise and commendation. In rescuing the Union Pacific system from the insolvency that threatened it in 1884, and placing it upon a sound financial basis in the face of opposition such as few railroads ever had to struggle against, the managers have accomplished a truly Titanic task. It is earnestly hoped that Congress will supplement their work with the legislation we have heartily recommended, and thus put this great railway system in a position which it is entitled, under every consideration of justice and sound public policy, to occupy.

Respectfully submitted,

JNO. F. PLUMMER.
JESSE SPALDING.
GEO. E. LEIGHTON.
RUFUS B. BULLOCK.
JAS. W. SAVAGE.

Hon. JOHN W. NOBLE,
Secretary of the Interior.

REPORT

OF

THE POSTMASTER-GENERAL.

POST OFFICE DEPARTMENT,
Washington, D. C., November 27, 1889.

TO THE PRESIDENT:

The first Postmaster-General submitted his first report to President Washington one hundred years ago. Its exact date was December 9, 1789. I mention this as of interest in this centennial age.

I have the honor to state that to the Postmaster-General of the United States is committed the management of the largest business concern in the world, consisting of a central establishment with almost 60,000 branches, and employing over 150,000 people. Its agents embrace one-half of the civil list. It maintains communication between the near and the remote places of the country with frequency, celerity, and security. The number and value of its messages are such that the imagination can scarcely form a conception of them. The capital in use in carrying on this vast business was last year \$1 to each man, woman, and child in the United States. Nevertheless, the postal service is not a money-making enterprise. It is not intended to be. It is a mistake to expect it to be self-sustaining until it is fully perfected.

The post-office is the visible form of the Federal Government to every community and to every citizen. Its hand is the only one that touches the local life, the social interests, and business concern of every neighborhood. It brings the Government to every door in the land and makes it the ready and faithful servitor of every interest of commerce and society. The people, from whom alone this all-pervading agency springs into action, and by whose encouragement alone it can supply their jealous needs, simply want the system administered with such efficiency and economy that it shall offer them more and more accommodations and tax them less and less. The only method I can suggest by which all their desires may be gratified, is not merely to talk about the application of business principles to the Department; it is really to apply them. It is not to work in poor quarters; it is not to transport mails afoot when they should go in railroad trains; it is not to tolerate disloyal or listless employes if better ones can be had; it is not, finally, to keep unwillingly abreast of the times. It is always to lead the times.

In twenty years the transactions of the Post-Office Department have doubled. In ten years more, by all the laws of growth, they will nearly have doubled again. To-day's work, the routine forms, the methods of operation, the relations of clerks and officials are almost as crude as they were in the beginning. The point of the great question which continually forces itself forward is, how long this outgrown system shall continue as it is.

SERIOUS CONDITIONS.

The Postmaster-General, in taking up the duties of the Post-Office Department, generally finds, with his own advent, that other new officers also enter the service. The whole organization at the top is changed and the work falls into untrained hands. During a period of ten years there were eight different Postmasters-General. In our form of Government this constant change will continue, but from a business stand-point thus to unsettle the service and to be always educating new sets of men can not be beneficial to any Department. However able any new Postmaster-General and his associates in the Assistant Postmaster-Generalships may be, there must be a course of training, which time and experience alone can give, before any of them are able to handle with real effectiveness the divisions placed in their charge. Even with each of them well skilled and at his best it is not possible to keep up with the work.

Ancient regulations and time-honored customs require the Postmaster-General to make numberless signatures each day to vouchers, journals, and papers that could as well fall into other hands. He must receive delegations of the people who have claims of all sorts to present, must make appointments to office and removals, must establish offices, and hear suggestions. The Senators and Members of the House must represent their constituents at the Post-Office Department and have the Postmaster-General's best attention in considering the 2,600 Presidential cases. Complaints of irregularity at the various post-offices, demands for enlarged service, come to the ear of the Postmaster-General. The various Department heads must refer many subjects and be in frequent consultation on the daily work of the office. There is but little time left to originate plans, to study the means of developing the system, or to improve the service. The Postmaster-General is continually in the deep drudgery of each day's recurring duties, and with but little opportunity to attend to anything beyond the routine work.

What is true of the Postmaster-General is equally true of the First Assistant. To that officer belongs the appointment of the postmasters of the fourth class, of which there are over 56,000, and the vast correspondence involved; the approval of bonds; the location of post-offices; the matter of supplies for all the offices; the supervision of the carrier and clerical forces throughout the United States, and all the minutiae of the management of his immense number of offices. In the fourth-class offices changes are much more frequent than in the Presi-

dential. The low compensation and responsibility involved render it difficult to keep up offices at thousands of points. Think for a moment of a city of 60,000 population and the daily changes by death, defalcations, lapses, and necessary removals and an idea will be suggested of the labor attending this oversight. No one man can do the work as it is now organized, except in a superficial way.

The Second Assistant Postmaster-General is the master of transportation, having thousands of routes and contracts to see to and the necessary investigations connected with them. Each day is adding to the pressure of this office. The Third Assistant Postmaster-General is not less busy with the stamp and envelope divisions and the accounts of all the postmasters.

These ever-increasing burdens on the four higher officials emphasize the fact that the Railway Mail, the Foreign Mail, the Free Delivery, the Salaries and Allowance Division, the Money-Order Office, the Registry Division, the Dead Letter Office, the Division of Supplies, are conducted independently by their chief officers and ordered to report to the Postmaster-General or one of his three associates. They have but scant and irregular opportunity to consult, and therefore pursue a disjointed course of action not conducive to great results. So long as the present inadequate system continues, the Post-Office Department can never do its best work. Important matters are deferred for days because the superintendents and the chief officers can not move on from sheer force of circumstances preventing instructions. No matter how enterprising and loyal these superintendents are, they do not have a fair chance. The service will never be vitalized for its highest good and compacted for the right kind of aggressive work until the burdens of these important officials are partly unloaded upon some other officer.

What is needed first, is a Fourth Assistant Postmaster-General, to be in direct charge of the great divisions of the railway mail, the foreign mail, the money-order office, the registry and supplies divisions, and the dead-letter office. Transferring these departments from a supervision which is now only nominal and giving them in charge of the Fourth Assistant Postmaster-General would be a vast advantage. This is not adding to the cost, but adding revenue by gaining the direction of one guiding brain in these important arms of the service. Lift out of the office of the First Assistant Postmaster-General all duties except those of studying men for appointment, establishing offices, changing sites, examining reports of inspectors, and taking care of the bond division. This will always be enough for this official to attend to.

A NEW OFFICER WANTED.

Create a new place and find the best educated postal man in the service at the Post-Office Department, or in any of the 59,000 post-offices, and make him the general manager. No great business establishments can succeed that changes its principal officer once in fifteen months

The Post-Office Department can not do it any more than could the Pennsylvania or the New York Central Railroad. Who would commend or gain increasing confidence in such corporations if they changed presidents about once a year? With a work that must always be laborious and subject to mutations it is not likely that these frequent changes will ever cease, but the Department ought to be so organized as not to be greatly affected by any one man or set of men moving out. There ought to be one perfectly-educated postal man charged with the general management, whose controlling mind and firm grasp should remain while others come and go. Instead of a \$2,200 clerk allotting annually \$22,000,000, and necessarily delayed decisions in the different offices regarding questions affecting carriers and clerks and extensions of the service, and the thousands of details connected with the daily routine of the post-offices throughout the United States touching the welfare of millions of people, transfer the oversight of the salaries and allowance division and the free-delivery system, and many of the duties now devolving upon the first assistant, to a general manager, who, in imparting promptness and efficiency throughout the service, would earn his salary five times over.

The equipment of post-offices at present varies according to the zeal of the postmasters. Those who are aided by members of Congress and who most persistently knock at the door of the Salaries and Allowance Division, are in best condition. The extension of the free delivery, the location of stamp agents, the general development of the post-office business, needing the same effort as in any other kind of business, depend now almost altogether upon some kind of pressure from outside of the Department. There ought to be at least one of our officers who would know the needs of the service, and intelligently drive on the business from the Department stand-point, instead of being crowded along under the pressure of the postmasters.

In a service so intricate and complicated as the postal system, it would be hard to define all that would fall to the hands of such an officer. The needs of the vast system vary with localities. Telegrams are flying all day long asking instructions about losses, rates, defalcations in office, failures of sureties, robberies, misuses of the mails, casualties, fires, changes of location, and questions that demand attention instantly from some one understanding the whole system and one not engrossed with calls, correspondence, and perfunctory work. He would see that all the details of administration are thoroughly carried out. To enlist and retain the services of a man of the ability required would necessitate the payment of a large salary. Ten thousand dollars per year would not be too much to pay to the right man. He should be appointed by the President for ten years, subject to removal at any time if not equal to the work. I would have this place the apex of the whole postal service, the ambition of every superintendent of a bureau, chief inspector, division head, or postmaster, and similarly, and not too remotely, the ambition of every active, creative man in the service.

To this Controller or General Secretary would be referred all of the plans of improvements determined upon, and his business capacity and authority would bring about reforms at once, without the usual delay sometimes of months existing under the present cumbersome and antiquated methods. He would give right off to the city of Denver more than two deliveries a day; he would have given Chicago more than four deliveries long ago; Utica, whose postal business has nearly doubled in six years without additional help, would have proper treatment; he would see that the postal business of Indianapolis and other places like it, which had increased 80 per cent. in ten years, was not obliged to struggle along with no increase of clerks; he would give a great city more than one place to buy postage stamps; he would increase the registry offices and stamp agencies ten-fold, and more, if needed, in the large cities. If people in large towns had to walk a mile to buy a stamp he would see what could be done about it, and would do it quick. He would give to New York City, on demand, one thousand stamp agencies; Boston, four hundred, and Philadelphia five hundred, and every other place a proper plant. He would do these things as a matter of course, and he would get money back for the Department, because it always appears, by accident almost, that these small incidents of the service find such ready responses among the people that they pay for themselves over and over.

This General Secretary would apply himself to small but important matters of reform which more nearly concern the departmental service. If the Sixth Auditor were eight months behind his work because he lacked clerks enough by 75 to do it, the General Secretary would address himself to the correction of this abuse. If it took 100 clerks to discharge the business of the Dead Letter Office, he would see what could be done to decrease the labor caused by careless correspondents by devising ways and means to prevent mistakes. If some employes of the postal service worked six hours a day and others worked eighteen, he would see what could be done to equalize the pay or the hours. He would be the man of details of the Department, inspiring the whole service with promptness and zeal.

FIFTY-NINE THOUSAND DISTINCT POST-OFFICES.

The post-offices throughout the country bear little relation to one another. The touch of the Department upon them is very slight. The machinery is set up and then let alone if only certain formal reports are made at stated times. If complaints are filed the inspector visits the office, and unless the investigation necessitates removal the office runs on just the same until other complaints are filed, when the same course is repeated. The offices and the Department, without meaning it, are in an unfriendly attitude, because the postmasters are generally wanting something which the Department does not seem ready or able to grant. A new postmaster must learn the postal laws and find out what his

duties are the best way he can with the help of old clerks or of an inspector who happens along accidentally. There is but little to encourage, hardly anything to stimulate, a postmaster to do his best work. A new life and spirit must be infused. By dividing the country into postal districts and placing a supervisor over each, I believe it can be done.

I propose that there be twenty-six postal districts established by the Postmaster-General according to population and territory, each office in the district to be visited at stated times and records made and kept showing, first, the capacity of the postmaster; second, his personal attention to his duties; third, the order and discipline of the office; and fourth, the growth of the business, with such other matters as may be determined on. The postmasters of the Presidential classes in each district should be classified into three grades, namely: "A," to be marked "highest;" "B," marked "excellent," and "C," marked "fair," and all under the low mark to be reported for such action as the Department may deem proper to take. Those who receive the highest marking ought to be reported to the President for honorable mention and preferment. The supervisors would have to be experienced in the Postal Laws and Regulations, and to be possessed of enthusiasm for the perfection of the system, instruct the postmasters and clerks, point out possible improvements in the offices, and enlarge the business; to ascertain and keep the Postmaster-General continually advised, in short, exactly what the postmaster and clerks are doing for the salaries received, and exactly how the people of each community are satisfied with the postal service.

All these supervisors should report to an official who should take the lead in the work of the higher education of the whole postal establishment. That man himself should be at the head of a model post-office—the post-office of the city of Washington, which should be domiciled in the Post-Office Department building and should become the high school, as it were, for the postmasters, new and old, from all over the country, who visit the capital. Here the valuable mails of Congress and the Executive Departments would be handled with greater safety and care. The postmaster of the city, without increasing the expense of the Department, might readily become the Fifth Assistant Postmaster-General, in charge also of the educational and civil-service work in the entire service and its thousands of post-offices.

The Postmaster-General thus relieved of the dead-weight of numberless details, which would be left to the equally safe and prompt action of experienced and less occupied assistants, could intelligently exercise the functions of an administrative officer. He could apply the inventive and creative power of a mind freed from minor things, to the larger work of executive management of greater organization. He would do the planning, originate new ideas and inaugurate new methods, revise and make more practical and effective the regulations, study the systems of other countries, superintend the heads of departments, and

give constantly the touch of life to the entire system, making it more representative of the commercial energies and social requirements of the American people. He would ascertain by investigation, study, and experiments, and by encouraging invention, possible improvements that would make the postal organization an agency of larger service and greater convenience. Many of the newer and more useful discoveries in applied science might be utilized and fashioned into a quicker and more satisfactory service than the present agencies, which are now plainly proving themselves too slow. He would secure transit for mail on faster schedules; provide quicker collections and distributions in cities and towns by pneumatic tubes or other improved and more rapid couriers than now exist; push forward American mails as the forerunner of the extension of American commerce; lift the entire service into a larger usefulness for the people and a larger increase for itself.

These and other possible improvements would all be open to the research of a Postmaster-General. His would be the duty and opportunity to study them and the power of the Government, and the interest of the people would aid and stimulate him to lead in enterprise, departures, and experiments. The different things new and good, of possible utility by way of improved and quicker methods, or by way of applying discoveries in science to the practical use of the people, adding to confidence in the business world or pleasure in social life, should be diligently ascertained and promptly applied. The expanding energies of the human mind, the rapid progress and practical achievements of science, should be seen first rather than last in the conduct of the Government business.

The venerable clerk who is always with us, faithful to tradition and proudest of all in remembering precedents, should not worry and retard a progressive Department in this progressive age by making a wall of an opinion delivered in 1823 or citing a precedent that governed in 1848. And especially should the postal service utilize in this advanced time of the world everything that can make the mails anticipate the wishes and expectations of the people. The one man who should be expected to ascertain and apply to the postal service all possible better agents, whether they be thus employed in the business world or developed in science, is the Postmaster-General, who under the present methods is allowed no time for studying such great questions or for dealing with anything more than the passing subjects of every day.

A NEW DEPARTMENT BUILDING.

The Washington city post-office has long been a reproach to the capital and a disgrace to the country. It surely will not be tolerated much longer. I have to report still further evidence of its inadequacy. A commission made up of the First Assistant Postmaster-General, the Second Assistant Postmaster-General, the Commissioner of Pensions, the Supervising Architect of the Treasury, and the Postmaster of the

City, proceeded, under authority granted by a recent act of Congress, to find out whether the court of the Pension Building might be used for a new local post-office. An additional task was to see if other and better quarters could be procured. The commission has reported elsewhere that the court of the Pension Building could not be made suitable even by a lavish outlay of money, and that the business of the Pension Office would be seriously impeded, even if the health of the clerks was not impaired by such a change. Five other places, mentioned in reply to advertisements, were also examined. All were found to be poor. The present quarters, wretched as they are, must be endured, and the only thing left to recommend is that the insufficient and unworthy building on Louisiana avenue should be leased again at a very high rent, provided that the lessor will expend a certain sum for repairs to make it habitable.

While the offer is made by private enterprise to erect a suitable post-office building if a long lease can be secured, it is poor economy to enter into such a contract. It is better to suffer the present inconvenience for two or three years until the Government can erect a good building. The suggestion is made in some quarters that a separate structure be built for the city post-office, and that a commodious edifice be built somewhere else for departmental use. The true idea, however, is to group all the postal business and the city post-office under one superintendence in one well-planned building, to be in every sense a model home for departmental and post-office work.

The cramped condition of the departmental force is well stated elsewhere by the chief clerk. In 1880, when the city post-office had to be moved away from the departmental building, there was but one office, the topographer's, maintained outside. As early as that, Postmaster-General Maynard realized the absolute necessity of some comprehensive improvement in the very near future. Now there are five branch offices maintained outside of the departmental building, and, although almost 400 clerks have been moved to these additional quarters, yet a larger number than ever before crowd the present building. Compared with the other Departments, the Post-Office Department fare badly in this respect. Each clerk in the State, War, and Navy Building has a third more space to work in than one of ours. The hallways of the Post-Office departmental building are jammed full of files, and made not only uncomfortable but unhealthy. Two hundred and forty thousand quarterly reports are received annually from the postmasters, and 480,000 weekly statements come in each year from money-order and postal-note offices. Money orders and postal notes alone to the number of 17,000,000 annually have to be handled. All of these files and records must necessarily be preserved a certain time, and although they are destroyed as promptly as seems proper they are constantly in the way.

The question is simply whether the Government cares to go on in this

way or not. Here in Washington mails of the Departments and of the two branches of Congress must be collected and dispatched to all parts of the country. In the present city post-office the clerks, who have doubled in numbers since 1879, when the city post-office was first leased, simply can not perform promptly this important work. A delay over night is a day's delay, and a delay over night is a common thing. The Government is paying \$20,000 annually for the use of small buildings scattered about the city; buildings which accommodate these branches of the Post-Office Department but poorly, and which, scattered as they are, add to the cost and impair the efficiency of the whole service. The entire postal business carried on in Washington should be conducted under one roof. This is the creditable way; it can also be shown that it is the economical way; and in view of these facts, it is respectfully recommended that a commission be appointed by Congress to select a site and forthwith purchase a suitable property upon which to erect a new building in which to consolidate the bureaus of the Department and the city post-office.

GROWTH OF THE POSTAL SYSTEM.

It is related that Postmaster-General Benjamin Franklin was quite occupied and not a little troubled by the management of seventy-five post-offices. From the small beginning indicated in the early records the postal system has grown marvellously. In fifteen years its advancement has been even more astonishing, as the following figures are enough to show:

Year.	Post-offices.	Length of routes (miles).	Gross revenue.	Total pay of post-masters.	Stamps issued.	Stamped envelopes and wrappers.	Postal-cards.	Money-orders.
1874.....	34, 300	270, 000	\$26, 500, 000	\$5, 800, 000	632, 000, 000	136, 500, 000	91, 000, 000	\$74, 400, 000
1880.....	43, 000	344, 000	33, 300, 000	7, 700, 000	876, 000, 000	207, 000, 000	273, 000, 000	100, 300, 000
1889.....	58, 999	416, 159	56, 175, 611	13, 168, 990	1, 961, 980, 840	452, 782, 300	386, 808, 500	115, 081, 845

The following statement shows the number of employés in the various branches of the postal service and the total number to date:

Clerks:

First-class offices.....	5, 936	
Second-class offices.....	1, 873	
Third-class offices*.....	4, 766	
Fourth-class offices*.....	34, 889	
		47, 466
Carriers.....	8, 830	
Subcarriers.....	2, 005	
		10, 835
Railway-Mail Service, total employés.....		5, 640

* The last two items estimated.

Contractors:

Star-routes	6,534	
Steam-boat	134	
Railroad	2,113	
Substar-route	10,396	
Substeam-boat	13	
		19,190

Mail messengers	6,434
Special-delivery messengers	928

Postmasters:

First class	102	
Second class	517	
Third class	2,043	
Fourth class	57,176	
		59,838

Employés in Post-Office Department	604
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Grand total of employés in postal service..... 150,935

The magnitude of the work that requires 150,000 men every working day in the year is something to ponder. Many of these men in line and staff are devoted and enthusiastic. The Postmasters-General have wrought with great ability, but the country grows so fast that the Post-Office Department unconsciously has lost step and fallen behind in the steady march of quickening enterprise.

GOVERNMENT TELEGRAPH RATES.

By an act of Congress approved July 24, 1866, the Postmaster-General is directed to establish annual rates for the telegraphic service of the Departments of the Government. The act says:

Telegrams between the several Departments of the Government and their officers and agents, in their transmission over the lines of any telegraph company to which has been given the right of way, timber, or station lands from the public domain shall have priority over all other business, at such rates as the Postmaster-General shall annually fix.

In view of the privileges granted by this act to telegraph companies to enter cities and traverse roads everywhere, and, further, in view of the fact that by this concession telegraph companies are permitted to interfere with the Post-Office Department in its business of transmitting correspondence, diminishing the profits thereof to the advantage of stockholders of telegraph companies, and, moreover, in consequence of the rates to members of the Associated Press syndicates throughout the country, I proposed to the various telegraph companies that a rate should be made to the Government of one mill per word which was practically two mills a word as messages are usually counted. It was asking that the service should be done for one year for about \$25,000.

The Western Union telegraph company had required the Government to pay for a number of years past a large sum of money for what it does for other customers for nothing, to wit, payment for the name of the place from which the messages are sent, the person's name, the official

title, the place forwarded to, and the signature, which on short messages have practically doubled the body-word rates. The expense of telegraphing, according to the reports of the Western Union Telegraph Company, for a number of years had been reduced about 15 per cent., while no reduction had been made to the Government. It therefore seemed to me, all things considered, that the telegraph companies could be reasonably expected, for a time at least, to do the business of the Government at a merely nominal rate.

At the same time the Postmaster-General sought consideration, first, for an exceptional rate for the Department messages believed to be warranted by the rates to others and the assistance rendered by the Government to the telegraph companies under the act of 1866; and second, (incidentally and not connected with the subject of fixing rates), he endeavored to obtain consideration for a proposition to establish, not for Government business but for the people at large, a limited service at lower rates, using the post-offices, stations, and ordinary deliveries of the post-offices, according to a plan to be prepared for submission to the Fifty-first Congress. The idea was, to connect the telegraph wires with all the free-delivery offices and to take messages at or about one-half the current rates, delivering by letter carriers by regular deliveries.

With no other liability for telegraphic messages than that for the ordinary mail; with no necessity for booking messages, or auditing and keeping cash accounts; by using postage stamps in payment as for letter postage, the cost of the service would be reduced and the rate could be fairly reduced on telegraphic messages. The delivery of such telegraphic messages in another city on the day they originated seemed to me to offer an accommodation that vast numbers of people would avail themselves of, especially for communications of a social and family nature, if the service could be performed at lower rates. The equipment of the post-offices seemed to be all ready to do this cheaper service.

The negotiations were not fruitful, except in a general public discussion of the subject of telegraphy. The fact was developed that certain favored customers had rates as low, if not lower, than the Government, and that the Western Union Telegraph Company held that the concessions of the Government under the act of 1866 were of no value. It was also proven to my satisfaction that special contracts were made for large numbers of words at the rate of a mill a word, and that individual members of the Associated Press syndicates are charged the rate of a mill a word and less. It is fair to state, however, that the press messages ordinarily yield to the company, through duplication, a larger rate than a mill a word. For example, a message sent for the Associated Press from the hands of one operator is received simultaneously by ten others or more, and the cost of the message is divided among ten customers. To lessen the expense to the company it was proposed to take the Government messages from direct wires at the various De-

partments. No agreement was reached on a reduction of rates, and there was no proposition of concession, except an offer of Dr. Norvin Green, president of the Western Union Telegraph Company, to extend the circuit of 1,000 miles to 1,500 miles, at the old price, and simplify the rate for extra words. As this offer covered only a small portion of the business of the Government, it seemed of trifling value, and the Postmaster-General declined it.

In view of all the foregoing facts, I endeavored to obtain an exceptional rate for the present year. The justice of my position, however, was not admitted by the Western Union Telegraph Company. The lapse of time in fixing the rates causing some embarrassment at the accounting desks of the Departments, and desiring to avoid further controversy, I felt obliged to determine the rates, which I did, waiving all other considerations and basing the same upon commercial and transportation rates to favored customers, and upon rates that had been in force for the public generally preceding the time when the Western Union Company absorbed competing lines. The rates fixed by the order of October 30, 1889, to be in effect from July 1, 1889, excluded payment for all words outside of the body words. The order was accompanied by a suggestion for the appointment of a commission to ascertain the cost and value of telegraphic service in order amicably to agree on a basis on which to fix rates at the proper time for the ensuing year.

The Western Union Telegraph Company declares the new rates fixed on the basis above mentioned to be a "confiscation of its property," and, though continuing the service, declines to accept the rate as final payment. It proposes to make its claim in the courts, but offers to submit the question of rates for this year to a board of arbitration such as proposed by the Postmaster-General to ascertain rates for the ensuing year. The entire correspondence is full of valuable information and is printed for reference on the pages following this report.

The act of Congress directs the Postmaster-General to fix rates, but gives no authority under which he may appoint a commission to inquire into the costs and value of telegraphic service. It will be necessary, therefore, if the course suggested be approved, to authorize the Postmaster-General to proceed in the premises.

I confess to a disappointment in that the negotiations with the Western Union Telegraph Company did not lead to a scheme which I hoped to submit with this report for your approval, whereby the people at large could have the benefit of telegraphic service at popular rates. It is stated that merchants, bankers, and newspapers are now the principal customers of the telegraph companies in this country. The statistics of the telegraphic system of continental countries show that a large proportion of the customers (50 per cent. is stated by some persons) are family and social messages, and not from business sources. With a lower telegraphic rate and with stations at the windows of the post-offices, to which ladies are accustomed, an entirely new class of business

would grow up, affording great convenience to many not now in the habit of using the wires. The telegraph is defined to be "an instrument for conveying intelligence beyond the limits of distance at which the voice is audible." This definition would apply equally to the post-office, and is in fact the object for which the post-office was established.

The great propriety and advantage of a united service can not be questioned from a point of convenience and economy to the people. There is no reason whatever why the night messages of the telegraph companies should not be delivered as postal matter by the first morning delivery of the carriers. This is proper post-office business, and would add to the profits of the Department. The vast net-work of wires covering the country could easily reach many of the village post-offices and benefit more people than by stopping at the railroad stations, which are often a mile or more distant from where the people live. An experiment could be easily and quickly made to ascertain whether the demand for cheaper telegraphic service exists as is claimed. It could be done without any outlay of money by the Government, and with no interference with existing telegraph interests, inasmuch as it would create, as stated, a new class of business. Moreover, many people becoming acquainted with the uses of the telegraph, would wonder how they ever managed to get along without it; and would find themselves using the swifter service as well as the limited, and financially guaranteed messages would continue to be confined to and carried by the existing corporations.

A contract should be made with telegraph lines now in operation, or that may be hereafter built, under advertisement and public bid, at the most favorable rate that can be obtained, in the same manner as the Post-Office Department now contracts with railroad companies for the carrying of letters and postal cards, connecting the wires with free-delivery and other designated post-offices, and receiving messages to be delivered in each instance at the next carrier delivery after their receipt in the city to which they are sent. Some of the free-delivery offices deliver mail ten times a day, some six, and few less than four. A Washington message to New York or Boston, announcing that the sender is leaving by train and is to be met at the station; or any kind of message which will be in season if delivered the day of starting, would fall into one of several regular deliveries at the office connected by telegraph in the other city. The slower service would answer all purposes for numbers of people. No additional expense is required for office or clerk hire. One expert telegrapher could be selected when the postal clerks are appointed. If there was sufficient telegraphic business wholly to employ one man's time, so much the better. A clerk could be assigned for this particular work and the service would be that much more likely to be profitable. Repeating the fact of no other responsibility in this limited telegraph bureau than that for ordinary mail; no expensive system of copying and recording; by using postage-stamps

for payments, no cash accounting needed—the low expenses would justify low rates for the people's benefit. It is believed that a rate of 1 cent a word would make a self-sustaining service and in a short time be a source of profit. If each money-order office sent but three messages per day there would be 27,000 messages, which would be a good business. Connecting the money-order offices by wire, payments of money could be telegraphed by private code to various points free, or at a trifling cost, and add to the convenience of many people.

I respectfully ask that such legislation be enacted as is necessary to empower the Postmaster-General to enter into contract with responsible parties for a term not exceeding five years, with a privilege of renewal, on conditions favorable to the Government, for the purpose of establishing a Limited Post and Telegraph Service.

OPERATIONS OF THE CIVIL-SERVICE LAWS.

The departmental six hundred and four employés are all under the civil-service rules except the heads of divisions, and the watchmen, laborers, and charwomen. The branch of the service to which civil-service rules were last applied was the railway mail service. Inasmuch as particular interest has been drawn to the re-organization of this department, I feel called upon to refer to the facts in detail. The force consisted on March 4, 1885, of 4,356 men, who had entered the service under a system of examinations and probations established in 1877 by Postmaster-General Key, by which the service attained a high degree of efficiency. A somewhat similar system as to examinations had been followed voluntarily for a number of years previously.

Changes made in the Railway Mail Service during the four years from March 5, 1885, to March 4, 1889.

Year.	Remov- als.	Resigna- tions.	Probationer's dropped.	Deaths.	Totals by years.
March 5, 1885, to March 4, 1886.....	508	509	394	20	1,440
March 5, 1886, to March 4, 1887.....	446	453	91	25	1,015
March 5, 1887, to March 4, 1888.....	503	329	119	41	992
March 5, 1888, to March 4, 1889.....	571	664	103	32	1,352
Totals.....	2,028	1,937	707	127	4,799
Whole number on roll, March 5, 1885.....					4,356
Whole number on roll, March 5, 1889.....					5,334
Average clerks on the roll for each year.....					4,845
Total changes made during the four years.....					4,799

By an order of President Cleveland, dated January 4, 1889, the civil-service rules for the railway mail service were approved, to take effect upon a date subsequent to the expiration of his term of office. It was impossible for the Civil Service Commission to make proper examinations and prepare lists of eligibles by the date fixed. Upon their own letter of request to the President the time was postponed to May 1. When the 1st of May arrived there were yet remaining fifteen States

and Territories in which no examinations had taken place; but the President declining to extend the time, the force came promptly under civil-service rules.

It is proper to say that no other branch of the service had so many complaints against it as the railway mail service, and it was deemed best to remove immediately and rapidly inexperienced men of recent appointment, and others whose records seemed to have fallen, and replace them with as many of the old clerks as could be found, who had had long training in the service. This was an instance where the places sought the men, and not the men the offices. The years of actual service within the railway postal cars seemed the best proof of fitness for appointment.

The following tables are also instructive:

The actual changes in the Railway Mail Service from March 4, 1889, to April 29, 1889, inclusive.

Appointments to fill vacancies created by resignations, expiration of probations, and deaths	494
Other appointments:	
Old clerks restored.....	887
New clerks appointed	551
	<hr/> 1,438
Total.....	1,932
Colored men in the service March 5, 1889.....	36
Colored men in the service May 1, 1889.....	127

The total number of railway postal clerks in the service on the 4th of March, 1889, was 5,334. The re-instatements and appointments of new men from March 4 to July 30, 1889, were 1,932, leaving undisturbed 3,402 of those previously appointed; or nearly two-thirds of the whole number that were in place when this administration came in power still in place. This is so different from the current statement that I make record of the facts as a matter of information and reference.

The civil service rules became applicable to the inspector division on July 1, 1888. The work to be done by the post-office inspectors relates to depredations of the mail, defalcations, and irregularities in the offices. Their duties are complex and variable, and can rarely be measured by uniform rule. It is a personal and confidential service, requiring a class of men of the utmost quickness and discretion, men with eyes and ears that are always alert and nerves that are always steady, keen to track a stage-coach robber on the frontier or discover the missing mail on the railway post-office routes or at the postal stations, or lost in the street letter-boxes. It is imperatively necessary for the Department to obtain the highest order of talent for this delicate and indispensable service. The losses from the mail continue to be too large; the postmasters continue to need the assistance of the special agents of the Postmaster-General.

The postal department has an individuality of its own. The ordinary good clerk of the Government might suit perfectly well in any other of the civil places, but for post-office work he must almost learn a trade. There ought to be a kind of apprenticeship with promotions that would produce motion throughout the ranks from lowest to highest place. The post-office should be a school for the railway mail, the railway mail for the Department, the Department for the division chiefs, and the highest places in the service. The qualities that make a good postal clerk are of a high order—on his memory, accuracy, integrity, hang the engagements of the business and the social world. An idle minute on the railway post-office car may be felt across a continent. The unready pouch, carried past the railroad junction, goes to the next station to be returned to await the lost connection. That one wasted minute often means a mail ten hours late all the way along a run of 1,000 miles. The postal service is no place for indifferent, or sleepy, or sluggish people.

With 150,000 employés rightly selected, who feel a proper pride in representing the Government and are alive every day to improvement, the postal service would soon become the best in the world. It may be gravely questioned whether the present mode of selecting inspectors will furnish the peculiar ability which the Government should command.

SUPERANNUATED EMPLOYÉS.

In the Post-Office Department and the Sixth Auditor's Office, upon the prompt and intelligent dispatch of business in which the successful administration of postal affairs so much depends, there are nearly fifty employés who are sixty-five years of age or more. Some of these worthy people are still efficient, but a considerable number have become incapacitated through the infirmities of age from discharging the full duty demanded of the average clerk in the same grade. These have been provided with more or less easy tasks, and are permitted to continue in place. Certain others are almost wholly incapacitated by weight of years, and a few render but slight service because of continual illness. I have found one who has rendered no service whatever for about four years, and who has regularly drawn salary during the whole period. It is maintained that this person was injured while on duty in the Department, and several of my predecessors have declined to order removal.

I feel deeply that it would be a gross injustice in many instances to discharge these veterans of the service, who have spent the greater part of their manhood and womanhood in the Government service, who are without other means of support, and who have neither the opportunity nor the qualifications to secure remunerative employment elsewhere. At the same time a sense of responsibility as an executive officer urges me not to refrain from saying that the public service would be placed upon a far better plane and the departmental business would be more promptly and

intelligently conducted were these elderly clerks, worn out in the harness, replaced by younger and more active ones. The former are a constant drag and their continuance in employment means simply that the greater part of the duties which should be assigned to them must be performed by their more youthful fellows. This is manifestly unjust to the latter as well as to the Department as a whole, because it is charged with a certain number of employes each of whom is supposed to render a full equivalent for the compensation paid.

The practice of retaining these superannuated clerks through motives of humanity because no other provision is made for them has grown to be a serious embarrassment. I admit and agree to the objections urged against a civil pension list, but I respectfully suggest some action be taken to relieve the present situation. Authority to retire the clerks who have arrived at a certain age upon the report of three Bureau chiefs and allow one year's pay upon such retirement will alleviate much of the suffering which would otherwise ensue, will not involve a permanent charge upon the country, and will be of great economy and vast advantage to the departmental service. It is suggested that the necessity for some provision of this kind will become greater with the advance of time.

RESIGNATIONS AND REMOVALS.

Some statistics of appointments, resignations, and removals are interesting. The figures with reference to Presidential offices between March 4, 1889, and July 1, 1889, are as follows :

By deaths	24
By resignations.....	176
By expirations.....	105
By offices becoming Presidential.....	119
By removals for various reasons	136
Total	560

Of these 55 were removed upon inspectors' and other official reports; 23 others had served over four years, 22 others had an average service of nearly four years, and the remaining 36 were removed to secure a better service.

The statistics furnished by the First Assistant Postmaster-General, giving the totals of changes in offices of all classes, are as follows:

Changes from 1885 to 1889 inclusive.

	June 30, 1885.	June 30, 1886.	June 30, 1887.	June 30, 1888.	June 30, 1889.
On resignations and commissions expired.....	6,204	9,112	6,863	6,521	8,854
On removals.....	810	9,566	2,584	1,244	7,853
On death of postmasters.....	412	587	589	659	553
On establishment of new offices.....	2,121	3,482	3,043	3,864	2,770
Total.....	9,547	22,747	13,079	12,288	20,030

The following is a statement, taken from the records by the appointment clerk, showing the changes made in the excepted places in the Post-Office Department from July 1, 1888, to March 4, 1889, and from March 4, 1889, to June 30, 1889. The number of soldiers included are given :

Changes from July 1, 1888, to March 4, 1889.....	42
Soldiers appointed	4
Soldiers resigned, removed, etc	11
Of whom three were promoted to higher grades.....	
Changes from March 4, 1889, to June 30, 1889	48
Soldiers appointed.....	8
Soldiers resigned and removed	8

Of the forty-two changes from July 1, 1888, to March 4, 1889, sixteen were for resignations and seven for removals.

Of the forty-eight changes from March 4, 1889, to June 30, 1889, twenty were for resignations and eighteen were for removals.

FOREIGN MAILS.

A wide-spread demand exists for prompt, regular, efficient and speedy mail service to foreign countries, especially to our Central American, Mexican, and South American neighbors, and to the trans-Pacific countries. It seems to be universally conceded that the policy which other nations have adopted in the treatment of steam-ships engaged in foreign mail service, of paying them liberally for such service, has caused lines to be maintained which otherwise could not have existed. The British post-office in the year 1888 expended in its foreign mail service \$5,150,003, being \$1,470,000 more than its receipts from this source. France, in addition to the bounty which it provides for the construction of steam-ships, pays as compensation to the ship-owner at the rate of 30 cents per mile per ton for each thousand miles traveled. Germany, Spain, and Italy pursue the same policy. The total expenditure of the United States Government to foreign steam-ships for mail service during the last fiscal year was \$396,582.51; while the amount paid to American steam-ships for similar service was \$109,829.14.

The law gives to the Post-Office Department a wide discretion in the matter of payment to railroads, coastwise steam-ships, inland steam-boats, and to every species of mail transportation except only in respect to the payment to be made to American steam-ships engaged in the foreign trade. In dealing with this important factor the Department finds itself hampered by the provisions of the law enacted in 1858, which limited payment to be made to American steam-ships to the sea and inland postage actually earned. The maintenance of this law on the statute-book is probably the result of oversight. At that time the rate of postage was somewhat commensurate with the extent of the service rendered, and the average rate per half ounce for letters to the countries referred to was about 25 cents. Since then the United States entered into

postal treaties with other countries by which this rate was reduced to a maximum of 5 cents, which is one-fifth of the former rate, and this country obligated itself by such treaties to cause letters to be forwarded at that rate. All other contracting nations make compensation to steam-ships irrespective of this 5-cent rate.

The law referred to not having been repealed after the enactment of the postal treaties, as it was probably intended, compels this Department to restrict payment to sea and inland postage, no matter how manifestly inadequate such payment may be. It must not be forgotten that our ports are open to the vessels of every nation engaged in the foreign trade and closed only to foreign ships engaged in the coastwise business. No restriction in payment exists upon the statute-books to American ships engaged in the domestic trade, though they are protected from foreign competition. The restriction referred to does exist as against American steam-ships engaged in the foreign trade, who are compelled to encounter the opposition of foreign steam-ships, in many cases liberally subsidized, and in every case where mail carriage is performed at least liberally compensated.

There is only a single instance in which the Department is free to make contracts that afford just compensation for mail carriage from domestic to foreign ports, and that is the transportation between Tampa, Fla., and Havana. There is no reason why the principle which governs this case should not be extended to all cases in which American steam-ships are engaged. The result of this restriction is that few American steam-ships are engaged in foreign trade, and where they do exist it is because of liberal payment made by foreign governments to those steam-ships for the carriage of the mail to the United States. This Government, on the other hand, pays inadequately for the outward carriage. Illustrative of this is the line from Newport News to Brazil, and also the line from San Francisco to New Zealand and Australia. Neither line could probably maintain itself except for the payment made for mails to the United States, the amount paid for outward mails being greatly disproportionate to that paid by Brazil in the one case, or the British colonies referred to in the other.

It is hardly the province of the Post-Office Department to descant upon the importance of encouraging American steam-ships to ply to foreign ports, or to lay stress upon the tremendous increase of trade with foreign nations that follows the establishment of American steam-ship lines between this and other countries, as has been the case in the Australian service referred to, where exports from this country have increased at a steady ratio of more than 10 per cent. per annum since the first contract was made by the British colonies with American steam-ship lines, but it is pertinent to refer to its powerlessness to contract with American ships for the purpose of securing speedy, regular, and adequate service with foreign countries; and I recommend that the

barrier which the present law creates be removed, and that the Post-Office Department be authorized in its discretion to make contracts with American registered ships of defined tonnage and prescribed rate of speed for a period of years, after due advertisement shall have been had and opportunity for competition afforded, so that while just pay may be given to the carrier the Government may be able to obtain service in all directions that it may deem important.

Should it be thought best to restrict the aggregate expenditure to be made in this direction, I call attention to the fact that the receipts from the trans-Atlantic mail service in excess of its expenditures during the last fiscal year, making no allowance for inland carriage, have been \$639,617.38, and the aggregate disbursement to be made by this Department for this service, should it be deemed advisable, could be limited at least to the profits accruing therefrom.

In extending mail facilities to countries to which they do not now exist, some basis of compensation other than that of the volume of mail carried must manifestly be had. It has been suggested that the rate of postage to foreign countries should be reduced, but as these rates include, without further compensation, the performance of the attendant inland service, the present rate is quite low enough and should be maintained at least until such time as adequate facilities in the foreign service have been fully provided.

The establishment on ocean steam-ships of a system similar to that in the railway post-office cars, in order to prepare the foreign mails for instant dispatch on arrival at port, has had much attention, and the Department is now in correspondence with the postal authorities of the German Empire and one of the principal transportation companies looking to this end. The subject will require conference with each of the foreign nations before any change in the present system can be inaugurated. The adoption of a Marine Post-Office system would be a great advantage to the business world, and on days when vessels arrive after 1 o'clock in the afternoon it would often make a difference of one day's interest on remittances that under the present system can not always be delivered the same day. A Clearing-House centrally located near the steam-ship docks for the handling of foreign mails only, to transfer the outgoing mails direct from railroad stations to steam-ships without passing through the New York City post-office, and to dispatch instantly the properly separated arriving mails to the railroad stations, excepting the New York City mail, will allow the outgoing mails in each city to remain open later and speed the delivery of all incoming mails. The experiment that has been made at the Boston office in dispatching the foreign mails direct to the ships, instead of through the New York office, has clearly demonstrated the practicability of keeping foreign mails open longer in the interior cities.

SUNDAY MAILS.

Early in the present administration the subject of Sunday mail service was brought forcibly to the attention of the Department through numerous letters and memorials from individuals and associations. On the 18th of May last a circular letter was addressed to the postmasters at one hundred of the largest post-offices in the United States. The following is a copy:

SIR: With the view of ascertaining the relative importance of the receipt and dispatch of mails at post-offices and the delivery therefrom to the public on Sunday, as compared with the same on the other days of the week, and in order to reduce the work on that day if it should be found practicable and proper, I will thank you carefully to collect information on the following points as applied to Sundays in the coming month of June, and make report thereon in detail to me, to wit:

(1) The amount of postage-stamps, postal-cards, newspaper wrappers, etc., sold at your office on each Sunday in June.

(2) The number of callers at your post-office on each Sunday in June.

(3) The number of mails dispatched and received on each Sunday in June and the approximate extent of such mails.

(4) The number of letter-carrier collections, the approximate extent of the mail matter collected, and the hours at which the several collections were made.

(5) The number of employés on duty each Sunday and the hours of service of each.

I shall also esteem it a favor if you will submit to me, with these replies, any suggestions which may occur to you, after careful thought, as to the means and the mode of reducing Sunday work in post-offices.

The replies to the queries were received in due time, accompanied in many instances by suggestions, and they were tabulated so that results might be seen more readily. They show that as a rule the sales of postage-stamps and stamped paper on Sunday are comparatively insignificant, and that the callers for mail matter on that day comprise but a very small proportion of the patrons of the post-offices. The letter-carrier service in cities is confined substantially to the collection of matter so that it may make the earliest dispatch, and to a brief accommodation of the residents of the various routes by the carriers at the post-offices.

The general tenor of the suggestions as to the means and the mode of reducing Sunday work in the post-offices seems to be that so long as there is maintained a railroad service on that day for the carriage of mails there must be either a corresponding local service for the handling and treatment of the matter so carried or quite a general delay of such matter, resulting in considerable accumulations for the first business day of the week, and in the consequent derangement of the business, both of the post-offices and their patrons.

This subject shall continue to receive my thoughtful consideration, and I shall make use of all proper means tending toward the minimizing of post-office work upon Sunday, because I believe that the Government should, as far as possible, make no requirements which will prohibit its employés from the enjoyment of a day of rest.

I have inquired somewhat as to the way in which this question is dealt with in other countries, and have been much interested in the

information gained as to Sunday service in the postal establishment of Great Britain. The post-offices in the London district are closed on Sundays, with the exception of a few which are open during certain hours for the receipt and dispatch of telegrams only. There appears to be a total cessation of postal business in that great city, upon Sunday. Such is not the case, however, in the town districts, with the method adopted as to the treatment of the subject in its application to the smaller post-offices. In one respect, at least, the Sunday service at British post-offices is more extensive than in this country, namely, that at all offices which are open on Sunday, the public are allowed, not simply to purchase postage-stamps, but also to have letters registered during the time such offices are open, namely, from 9 to 10 in the morning, and one other hour at least. Neither registry nor money-order business is transacted in any post-office in the United States on Sunday.

The British regulations state that in no provincial town in England or Ireland is there more than one delivery of letters on Sunday. As a rule, there are no deliveries in this country on Sunday. It is provided that any person may prevent Sunday delivery of his own mail by addressing to the postmaster a written request for the retention of such mail in the post-office. Applications for the discontinuance of the delivery of letters on Sunday in the town districts can only be entertained provided they are supported by the local town authorities, and that satisfactory evidence is afforded that the inhabitants are unanimous, or substantially unanimous, in desiring the change; and in rural districts every memorial for the establishment or discontinuance of a Sunday post must bear the signature of those persons who receive two-thirds of the letters delivered upon the post, otherwise the application can not be entertained.

I shall study this subject with the hope of finding some plan to give effect to the will of the majority of the patrons of each office.

RAILWAY MAIL.

The traveling postal-car, though a familiar sight, has but few real acquaintances among the people. It thunders on day and night over every railroad, full of bustling clerks, taking up sacks of mail, sorting them between stations and laying them down at proper destinations. Over five thousand men, full of intelligence and pluck, are on their feet swinging to the motion of the train, exposed to danger, deprived of their homes, making ready tons of letters and newspapers for quick deliveries.

The railway mail is the spinal column of the service. The most diligent and persistent effort has been made to strengthen it and with great success. The broken links have been mended, the cables of transit have been tightened and quickened. The transportation companies have shown a most gratifying interest in the request for special schedules for fast limited trains for mails only, and not for passengers. Probably no public service ever had a more devoted and enthusiastic

set of division superintendents than the railway mails, and the high-water mark for this service has been raised very high.

The new transcontinental mail made its first trip from New York to San Francisco, starting from both termini on the 17th of November. It ran through on time by a specially arranged schedule, which reduced the time westward from one hundred and twenty-eight hours and fifteen minutes to one hundred and eight hours and forty-five minutes, so that deliveries will be made in San Francisco a full day in advance of the present time. Eastward, the former time was one hundred and forty-one hours; this has been reduced to one hundred and twenty-one hours; and by this change also a full day is substantially gained to the business man of New York; and it may be suggested also that this quickening of the trans continental service means corresponding benefits to all intermediate regions.

Figures do not adequately convey an idea of the extensive operations of the Railway Mail Service. At the close of the last fiscal year mail service had been authorized upon 150,381.50 miles of railroad, upon 133,110.43 of which postal clerks were employed. There are forty-five inland steam-boat lines, aggregating 5,543.78 miles, on which postal clerks rendered service. The total number of clerks on railroad lines was 4,947, and on steam-boat routes 51; a grand total of 4,998 men, who traveled 124,021,032 miles on railroads and 1,849,703 miles on steam-boats in the performance of their duties. They distributed 7,026,837,130 pieces of ordinary mail, and handled 16,000,000 registered pouches and over 1,100,000 through registered pouches and inner registered sacks. The increase in the number of pieces of ordinary mail matter distributed over the preceding year was 1,192,146,255. The number of postal clerks on railroads increased by 306 and the number of miles in distance by 6,602. In the annual miles of service performed there was an increase of 82,054, or nearly 5 per centum.

MONEY-ORDER TRANSACTIONS WITH FOREIGN COUNTRIES.

An examination of the table giving the number and amount of the money-order transactions with foreign countries shows that the aggregate amount of money-orders issued in the United States for payment in European countries largely exceeds the aggregate amount of money orders issued in those countries for payment here. For example, the whole amount of money-orders issued in this country for payment in the United Kingdom was \$5,117,169.05, and the amount issued there for payment in the United States was only \$860,065.80. The amount issued in this country for payment in Italy was \$920,155.50, and the amount sent here from the latter country by money-orders was \$53,098.66. The amount remitted to Sweden by money-orders was \$743,905.07, and the amount received from Sweden was \$74,421.11. This great excess in the amount of money-orders issued in the United States for payment in the above mentioned countries is to be accounted for by the

fact that these money-orders represent remittances sent by emigrants from those countries, residing here, to aid their families and relatives at home, but in some instances these remitters sent their money to be deposited in Government savings-banks, to there remain until their return to their own country.

The table in question shows, on the other hand, that the aggregate amount of remittances by money-orders to the United States from the British West Indies, Japan, the Hawaiian Islands, and the Australasian Colonies of Great Britain largely exceed the amount of money-orders issued here for payment in those countries. For instance, the amount of money-orders issued in this country for payment in Jamaica was \$2,578 only, while the amount of the orders issued in Jamaica for payment here was \$82,656.74; the amount of the orders issued in the United States for payment in the Hawaiian Islands was \$4,734.28, and the amount of the orders issued there for payment here was \$29,666.39; this country issued money-orders to the amount of \$11,247.05 payable in Japan, while that country issued for payment in the United States money-orders amounting to \$22,217.89; and money-orders amounting to \$12,660.89 were issued in this country for payment in New Zealand, the latter country issuing for payment here money-orders amounting to \$19,029.86.

The excess of money-orders from the above-named countries paid in the United States is explained by the circumstance that these money-orders were sent mainly in payment of goods and miscellaneous small articles purchased in this country, there being but very few emigrants from the countries in question residing here.

It will be observed that the amount of money-orders issued in Jamaica and paid in the United States exceeded by \$8,235.63 the amount of money-orders issued in Sweden and paid here, while the amount of money-orders issued in the United States and paid in Sweden was greater by \$741,327.07 than the amount of orders issued in the United States for payment in Jamaica.

In the international money-order business between this country and Canada the difference between the amount of orders issued in each country for payment in the other is comparatively small; the amount of orders from the United States paid in Canada being \$1,281,897.69, and the amount of orders from Canada paid in the United States being \$1,419,271.42, a difference of \$137,373.73.

Although there are numerous Canadians living in the United States who send remittances to relatives in their native country, the amount of money-orders remitted to this country from Canada in payment of articles purchased here and of subscriptions to newspapers, periodicals, etc., more than counterbalances the amount of what may be termed "family remittances" sent home by Canadians residing here.

The object of the money-order system is to afford facilities to the public for the transfer, at cheap rates, of small sums of money.

Money-orders may be regarded as taking the place in the mails of paper money, which, in the absence of the money-order system, would generally be transmitted in ordinary letters by remitters of small sums, of whom a large proportion are unaccustomed to the use of bank drafts, which are, moreover, not readily procurable in many localities. The use of money-orders not only affords to the senders security from loss, but tends to exclude money from ordinary letters, in which the presence of money is always, in some degree, a source of temptation to persons handling the mails, and not infrequently brings about the rifling of the mails and the destruction of many letters in the search for contents of value. Some European postal administrations prohibit the inclosure of money or of articles of jewelry in an ordinary letter; if discovered therein, the letter is charged on delivery with a heavy fee in addition to the ordinary postage.

In the interest of the public as well as the postal service, the employment of money-orders for the remittance of small sums of money by mail should be extended as widely as possible. In furtherance of that object it would seem expedient for the Department to supply postmasters at the smaller money-order offices with circulars for distribution, in such manner as they might deem best, setting forth briefly the convenience and utility of the money-order system, of which many persons have no practical knowledge.

THE FREE DELIVERY SYSTEM.

There are at present 446 offices that accommodate the people with the mails at their doors. This is only about one-sixth of the number of Presidential offices; the other 2,216 oblige their patrons to call at the offices for the mail. Under existing law the extension of the free delivery is limited to cities of a population of 10,000 persons, or a gross revenue of \$10,000 annually. While this law stands the extension of the best form of postal regulations must be very slow. It is recommended that all places of a population of not less than 5,000, or where the post-office has shown a gross revenue of \$7,000 for the previous fiscal year, shall have the benefit of the free delivery system. This will extend the service to all the second-class offices, and to some of the third class, but in order to do this it will be necessary to amend the law to give the proper authority to the Post-Office Department.

BUILDINGS LEASED FOR POST-OFFICES.

On the 30th of June, 1889, the Department held leases on buildings occupied by post-offices and sub-stations to the number of three hundred and eighty-seven, at an aggregate rental of \$349,535.50, and an average rental to each office of \$856.43, and to each sub-station or branch post-office of \$1,158. Of these leases five of them only are ex-

ecuted for offices of the third class. At the date named above one hundred and twenty-six post-offices occupied buildings or parts of buildings owned by the United States, and between twenty-four and twenty-five hundred offices of the first, second, and third classes occupied premises owned by private parties, all without leases except the number stated above.

The law authorizes the payment of rent at offices of the third class not exceeding \$400 to any one office, and limits the term of lease at such offices to one year, although a term not exceeding five years is permitted at offices of the first and second classes. I fail to see any reason for this distinction, and I recommend that in this respect third-class offices be put on the same footing of those of the higher grades. One of the advantages of leasing for a term of years is the facility thus afforded of obtaining cheap rental. The owner of a building would, as a rule, be willing to let his premises at a lower price for five years than for one year. There is, therefore, economy in reasonably long leases, and there is no risk to the Department in making the term uniform at five years, in view of the fact that one covenant of the lease in use revokes it at the pleasure of the Postmaster-General whenever the revenues of the office bring it below the class at which rent may be paid by the Department, and the further fact that any lease may by its terms be terminated on a notice of ninety days. The advantages in all such cases are on the side of the Department.

I recommend, also, that in order to secure buildings especially adapted to the use of post-offices, the Postmaster-General should be allowed some discretion as to the length of the lease term. It is believed that in many instances new buildings would be erected by the owners, on plans suggested by the Department, and at no greater cost than under the existing provisions of law, if a lease of ten years were permitted; and I suggest that such changes in the law should be made as will admit of the exercise of this discretion in certain cases.

I renew the recommendation of Postmaster-General Vilas in his annual report of 1887, for the construction of buildings by the General Government for the exclusive use of post-offices at towns and cities containing a certain population, or where the gross revenues of the office reach a certain sum; and I suggest that such buildings might be erected at the free-delivery offices. At such places the rent now paid largely exceeds the average cost for rental named above. But if it did not exceed the sum of \$856.43 (the average cost per office) there would be economy for the Government by ownership of said buildings, for I am well convinced that they could be constructed and fully equipped at an average cost that would bring the annual interest thereon at Government rates greatly below \$800 each.

PENNY POSTAGE.

One cent postage is an easy possibility of the near future. It must come as a matter of course. If introduced to-morrow the cutting in half of postage would reduce the revenue on letter postage by probably \$15,000,000. We are not ready for this while the present deficiency exists. When the blessing of penny postage comes it should not require a tax in some other form to make up its cost. Moreover, it would seem to be wiser first to improve the facilities rather than to reduce the postage while the service still remains conspicuously imperfect. Many remote places have but one mail a week. Others are only one-half as fortunate. Sparsely settled portions of the country have very limited accommodations owing to the high cost of transportation.

Four new States have just been admitted to the Union, which will claim and urge rights for generous mail facilities in the interest of rapid emigration. Numerous reforms throughout the mail service are earnestly demanded. The whole system needs tightening up and vitalizing. We must needs work in that direction for a year or two and try to reach something near a self-sustaining basis. Do first the things most needed, and do them well. Accelerating and extending facilities in all directions would increase the revenue and rapidly bring us on towards penny postage. Everything can not be done in any one year. The new postal-card of large size, very soon to be issued, is almost large enough to be called a letter-postal card. It is as near penny postage as we can get at present.

POSTAL SAVINGS-BANKS.

If the letters and arguments presented at the Department and articles in the newspapers are an evidence of interest in this subject there is a steadily growing sentiment in favor of the Government offering through the post-offices a depository for savings. Foreign countries have for many years past extended these conveniences for the people and good results are reported without exception.

The report of the Postmaster-General of Great Britain for 1889 says:

The growth of business in the savings-bank has been exceptionally rapid during the year 1888. * * * The deposits in the year numbered 7,540,625, amounting to \$95,261,130, as against 6,916,327 and \$82,679,660, the number and amount for the year 1887. The withdrawals were 2,633,808 in number, amounting in all to \$79,013,675, showing an increase of 137,514 in number and of \$5,612,280 in amount over the number and amount for 1887. As a net result of these transactions, a total sum of \$292,781,970, including interest, remained to the credit of depositors on the 31st December, 1888, being an increase of \$22,911,645 for the year as compared with an increase of \$15,498,635 in 1887. The amount of interest credited to depositors was \$6,664,190, or \$443,820 more than in 1887.

The greatest number of deposits on one day was 60,936, amounting to \$907,445, and made on the 31st December. The greatest number of withdrawals on one day was 20,348, amounting to \$446,985, made on the 18th December. The average amount of each deposit was £2 10s. 6d., as compared with £2 7s. 10d. in 1887. * * * The average amount of each withdrawal was £6, 8s compared with £5 17s. 7d. in 1887.

The number of accounts opened in 1888 was 887,460 and 618,294 were closed. The corresponding numbers for 1887 were, respectively, 794,592 and 574,252. The total number of accounts open at the end of the year was 4,220,927, distributed as follows:

	Number.	Proportion to population.	Average balance due to each depositor.
England and Wales	3,900,334	1 to 7	£ s. d. 18 17 3
Scotland	148,288	1 to 27	8 8 11
Ireland	172,305	1 to 28	18 15 4

The total number of post-offices open for the transaction of savings bank business on the 31st December, 1888, was 9,022, or 302 more than in 1887, of which 254 were opened in England and Wales, 28 in Scotland, and 20 in Ireland.

The fact that over four millions of persons (4,220,927) in the kingdom of Great Britain alone take advantage of this means of security and saving is certainly significant. Not less so is the sum of nearly three hundred million of dollars (\$292,781,070) to the credit of the depositors on January 1, 1889. But the amount of self-reliance, thrift, and good citizenship encouraged by this feature of the Government is beyond any calculation.

To connect more intimately countless numbers of citizens with this country is a patriotic service. It would tend to weaken incipient disturbances; it would aid in breaking down sectional feelings. The State and private savings banks in many of the States where small deposits can be made are comparatively few in number. In some parts of the country there are no such opportunities offered. The chimney corner, the trunk, the closet, and the old stocking hide another surplus, not unlike that heaped up in the Treasury; and practically it is as much withdrawn from circulation. To offer needed security to these millions striving to be provident, to encourage other millions now thoughtlessly improvident, and bind closer to the nation all those who are benefited, men, women, and children alike, is worthy of the loftiest statesmanship.

The grave question at the threshold is what to do with the money deposited; how to put it into circulation and make it earn an interest. The claim sometimes made that for the Government to take up this business would be an interference with the banks and savings funds will not hold good. I maintain that the habits of saving engendered would be widely felt and increase the savings of all who are already depositors. Besides, but few of the existing institutions can afford to bestow their labor on receiving sums as small as those which the postal savings bank would invite. Fixing a limit to the amount of deposits at \$150 from any one person in one year would tend to turn away from the post-office banks to other banks and savings funds the aggregated deposits as soon as sufficiently large to be desirable to financial institutions,

I suggest early consideration of the question of establishing postal savings banks at 10,000 of the fourth-class offices in towns where such facilities are most needed, leaving the extension of this privilege to be determined after a trial of two years. There are three plans: First, to accept limited deposits, upon which interest at the rate of not more than 2 per cent. be paid; second, if objection be made to the Government obligating itself to pay interest, accept deposits with an agreement to invest and distribute their earnings less one-eighth of 1 per cent. for the cost of the service; third, if it is deemed inadvisable to undertake any such obligation, offer the post-offices as depositaries without interest, affording the people the convenience and safety. In each case the Secretary of the Treasury would loan the money, equitably distributing it to the banks in the States where the deposits originated to keep it in circulation, requiring United States bonds as security, and interest, if the Government pays interest, but not otherwise.

The suggestion of a modified plan for small savings is made in case the other plans are disapproved; that authority be given to the Department to redeem for cash under regulations prescribed by the Postmaster-General all undefaced postage stamps or postal cards when presented at any post-office on savings cards in multiples of \$1. While this would be the least important of the four schemes, I believe it would find a hearty response among the toiling people, especially the younger and smaller wage-earners.

THIRD AND FOURTH CLASS MATTER.

The distinctions existing between mail matter of the third and fourth classes are not easily ascertainable. The third class embraces miscellaneous printed matter consisting of books, circulars, etc. The rate of postage is 1 cent for each two ounces. Fourth-class matter comprehends articles of almost every conceivable character not above 4 pounds in weight. The only restriction besides that of weight is that the article shall not be of such a nature as to injure the contents of the mail-bag or to harm the person of the carrier. Postage is chargeable at 1 cent per ounce or fraction thereof. The shadowy distinctions between the two classes are a fruitful source of difficulty alike to the public and to the postal service.

The law officers of the Department are often at a loss in determining to which of the two classes certain matter belongs, and it is only to be expected that frequent disputes should arise between postmasters and their patrons on the subject. For instance, a postal regulation provides that samples of printed blanks shall be treated as third-class matter if designed to show the quality of the printing, and as fourth-class matter if intended to show the quality of the paper. In most cases the matter in both classes is of a commercial character, and there appears to be no good reason for making a discrimination in the charges for postage.

The carriage of fourth-class matter has proved to be of much benefit

to people living in the rural districts and on the frontiers. To these the only way open to procure small articles from a distance is through the mails. The express offices are confined to the more populous localities. There is hardly a community in the land too insignificant to be visited by the mail pouch. This country, while more advanced in respect to other classes of mail matter, is more conservative in the use of the mails for the transportation of parcels. Official statistics show that in the aggregate of ten of the principal European countries, the average charge for letters, reduced to our standards of value, is $5\frac{3}{8}$ cents to an ounce of written matter, our rate being 2 cents per ounce; for newspapers regularly issued it is $4\frac{1}{2}$ cents per pound, our rate being 1 cent per pound; for miscellaneous printed matter it is 6 cents per pound, our rate being 8 cents per pound; and on samples it is a little less than 6 cents, our rate for fourth-class matter, which includes samples, being 16 cents per pound.

Our foreign parcels-post system has led to a curious anomaly in our postal system. To compete with European nations in the sale of goods in the southern part of this hemisphere an international parcels-post system has been established between the United States and certain South American countries. By this arrangement goods are sent, up to a maximum of 11 pounds, in weight at a charge of 12 cents per pound. The parcel sent abroad, besides being carried through the domestic mails, is subject to an extra charge to the Government for transportation by sea. At the same time a parcel sent by mail from New York to a citizen living the shortest distance from that city is subject to a charge of 16 cents per pound and is not allowed to exceed 4 pounds in weight.

The statistics show that fourth-class matter bears a comparatively small proportion in the total volume of the mails. By my direction a record was made of the number of pieces and weight of each of the several classes of mail matter (except second class) dispatched on the 22d and 23d of October last from ten of the leading first-class, ten of the leading second-class, ten of the leading third-class, and ten of the leading fourth-class post-offices. The period selected was in the midst of great activity in trade, and it therefore represents more than a fair average of the entire bulk of fourth-class matter carried during the year. The post-offices selected would also mail an undue proportion of the fourth-class matter sent from all the post-offices.

The record shows that of the total of 5,983,805 pieces mailed at the forty offices during the two days in question, 3,382,571, or 56.5+ per cent., were letters; 528,076, or 8.8+ per cent., were postal cards; 8,907 or 0.15 per cent. were wrapped parcels under seal at letter rates; 1,962,925, or 32.8 per cent., were third-class matter, and only 101,326, or 1.7 per cent., were fourth-class matter. The total weight was 360,663 pounds, of which 69,849, or 19.3+ per cent., were letters; 2,772 pounds, or .7+ per cent., were postal cards; 2,776 pounds, or .7+ per cent., were wrapped

parcels under seal ; 242,447 pounds, or 67.2+ per cent., were third-class matter ; and 42,819 pounds, or 11.8+ per cent., were fourth-class matter. The average weight per piece was three-tenths of an ounce for letters, eight one hundreths of an ounce for postal cards, four and nine-tenths ounces for wrapped parcels under seal, one and nine-tenths ounces for third-class matter, and six and seven-tenths ounces for fourth-class matter. The average distances carried were 386 miles for letters, 339 miles for postal cards, 430 miles for wrapped parcels under seal, 558 miles for third-class matter, and 599 miles for fourth-class matter. The statistics will be found in greater detail in a table attached to this report. Appended to the table are extracts from nearly all the post-masters at whose offices the count was made as to the advisability of consolidating third and fourth class matter. Almost without exception they favor the step for reasons which are strongly presented.

The logic of the trifling average weight and small total of fourth-class matter carried is that the present rate of postage is prohibitory, and that the patronage from this class of matter arises more from necessity than from choice because of the lack of other means of transportation. The express companies graduate their charges somewhat by distances, and they offer special inducements for packages not above the limit of weight fixed for admission into the mails. The result is that they get the short hauls, leaving the long hauls to the Government.

Two courses have been suggested, first, to consolidate third and fourth class matter, not increasing the weight of packages reducing the postage to that of third class, which would be 1 cent for 2 ounces instead of 1 cent per ounce. The other course is to adopt the full parcels post, and carry, under certain regulations, packages not exceeding 11 pounds in weight at 1 cent per ounce. Continual and cogent reasons are presented from all parts of the country favoring one or the other of these propositions. There is undoubtedly a desire among the people of all communities to be placed in direct communication with the markets of all the cities. While the express companies perform excellent service, they do not deliver goods to the smaller towns, villages, and cross-roads enjoying post-office conveniences. The express companies carry packages to the larger towns, from which notification is sent to the smaller village, involving trouble and cost to such an extent that a constant pressure is brought to bear upon the Post-Office Department for relief.

The larger view is widely held and stoutly urged that the Government, having undertaken to carry merchandise in the mails, is bound to do the work as well and as cheaply as its competitors and to such extent as will give the greatest good to the greatest number. I have considered the subject very carefully and submit that we are not now prepared to consolidate the third and fourth-class matter, or to undertake the service of a full parcels post, for the following reasons: First, almost all the post-office buildings are overcrowded and space could

not be found in them to accommodate an enlarged package business; second, the R. P. O. cars are all insufficient for the present mail business, the Department being obliged to forward almost two-thirds of the postal cards and envelopes by freight in order to afford requisite relief for mail matter; third, the readjustment of transportation and star-route contracts would first be necessary to provide proper remuneration for carrying the additional mail; fourth, the exact profit or loss on fourth-class business now being done by the Department should be ascertained before any enlargement takes place.

If it be true, as is maintained, that the carriage of fourth-class matter would entail loss to the Department, no further enlargement should be made while the postal revenue falls so far short of the expenditure; neither is it just to favor one class of patrons at the cost of all others. If any subsidy is granted any class or section of the country, the compensation ought to be clearly apparent in some other direction. Whatever postpones one cent letter postage for domestic letters (and perhaps for foreign letters) should not be favored except so far as is necessary to improve along the best lines on which the Department is now working.

PROPER INSPECTIONS.

The losses in the transit of mails are so many and large as greatly to impair the reputation of the Department. It has been stated that capitalists recently organized an insurance company to guarantee, to a limited extent, losses from the non-delivery of mail matter. This is certainly a humiliating state of things, and no time should be lost in changing the conditions that produced this result. It will be necessary to add local inspectors at many points, and to provide for a stricter surveillance at all places where the property intrusted to the care of the Department is handled. Consolidating all the now divided inspection force; supplementing it with a corps of local inspectors, and confining the work of the inspection department entirely to accounts, depredations, misuse of mails, and confidential matters concerning the offices and clerks, will improve the character and conduct of many offices.

It is astonishing to find how little is really understood about the postal system. The appointment of supervisors, according to the plan outlined, charged with the education of the postmasters and the clerks in order to advance the standards of management and the general conduct of the post-offices, will relieve the inspecting force, and while giving them an opportunity to do their work better it will also have the advantage of bringing into frequent contact with the postmaster and the business of the office a needed and regular superintendence that can not in any sense be associated with the confidential work implied in the present inspection official. The appearance of a post-office inspector in an average town is often the signal for foolish gossip not at all agreeable to the postmaster or his family; the visits are never intended to be annoying, but the fewer there are of them, within the limit of the proper care of the offices, the better. It is the rule not to make public the reports

of the inspectors. When removals from office are made on such reports it is recommended that it be so stated.

SOME OF THE WORK OF THE YEAR.

At the close of the year ended June 30, 1888, there were in operation 2,488 post-offices the postmasters at which are subject to appointment by the President, and 54,888 post-offices the incumbents at which were appointed by the Postmaster-General. During the last fiscal year the number of Presidential post-offices increased by 196, and the number of fourth class post-offices by 1,427. The number of post-offices established was 2,770 and the number discontinued 1,147. Both as regards establishments and discontinuances, there was a marked decrease as compared with the preceding fiscal year; in the former of 1,094 and in the latter of 498. The net increase in the number of post-offices was largest in the States of Pennsylvania, North Carolina, California, Alabama, Tennessee, and Michigan, in the order named, while there was a net decrease in both Rhode Island and Kansas.

The last fiscal year marked an increase of 43 in the number of free-delivery post-offices, and of 1,911 in the number of letter-carriers. The latter circumstance is attributable to the limitation placed by the act of May 24, 1888, upon the hours of employment of letter-carriers. There was an unexpended balance of \$42,058.10 out of an appropriation of \$7,000,000. The postage collected upon local matter exceeded by \$279,647.12, or $12\frac{16}{109}$ per centum, the total cost of the free-delivery service. The average cost of delivery per piece increased from two mills to two and two-tenths mills, while there was a small decrease in the average cost per carrier, and a decrease of a little over 10 per centum in the number of pieces handled per carrier.

The Division of Post-Office Supplies received during the year the large total of 184,262 requisitions from postmasters, and supplied thereon 277,632 packages or sacks of goods of various sorts. These articles are purchased for the greater part under the provisions of annual contracts.

The sixth annual adjustment of salaries of postmasters at Presidential post-offices was made upon the basis of the gross receipts accruing at the respective offices for the four quarters ended March 31, 1889, under which 102 offices were assigned to the first class and 517 to the second class and 2,033 to the third class. The two former, making a total of 619, come within the provisions of the act of March 2, 1889, in regard to the classification of salaries of clerks in post-offices. Six thousand six hundred and fifty-nine allowances for clerk hire were made, an increase of 21 per centum, and 7,402 allowances for rent, light, and fuel, an increase of 245.6 per centum. These were occasioned by the extension of such allowances under authority of the act of July 24, 1888, to post-offices of the third class, and to the readjustment of such allowances for first and second class post-offices. Ten thousand and sixty-eight allowances for miscellaneous items were made,

an increase of 23.9 per centum, and 780 allowances for furniture, an increase of 4.3 per centum. The aggregate amount involved in all the readjustments of postmaster's salaries amounted to \$4,643,900

The aggregate amount of salaries of Presidential postmasters will absorb 10.61 of the revenue of their offices, or thirty-one one thou. sandths per centum less than the percentage shown by the review of the preceding year, while these offices furnish over 75 per centum of the revenues of the Department. The review of salaries of postmasters of the third, fourth, and fifth classes, under the act of March 3, 1883, has been completed, and appropriations to pay claims thereunder have been made by Congress to the aggregate amount of \$1,221,350.

The annual rate of expenditure for inland mail transportation at the close of the last fiscal year was \$34,024,107.94, and the service included 15,077 star routes of an aggregate length of 233,331.81 miles, costing \$5,228,387.07; 6,344 mail-messenger routes whose total length was 5,023.27 miles, the cost thereof being \$949,188.85; there were 128 steam-boat routes, the length of which was 10,597.87 miles, and the expenditure \$446,032.48; 2,113 railroad routes costing \$19,441,095.78, comprising an aggregate length of 150,381.53 miles, while for 156 post-office car routes, the length of which was 26,659.85 miles, the cost was \$2,198,517.55. The annual rate of payment on account of 5,448 railway postal clerks amounted to \$5,268,600. The sum of \$196,630.83 was paid for mail equipments, and certain necessary and special facilities on trunk lines involved an expenditure of \$295,655.38.

In all classes of the mail service in operation on the 30th of June, 1889, it is shown that there were 25,661 routes, an increase of 792 or 3.18 per cent.; that the total length of the routes was 416,159.14 miles, an increase of 12,182.19 miles, or 3.01 per cent.; that the annual rate of expenditure was \$34,024,107.94 $\frac{7}{8}$, an increase of \$2,567,260.58 $\frac{11}{16}$, or 8.16 per cent. The total number of miles traveled per annum was 310,901,884.31, an increase of 23,650,828.55, or 8.23 per cent. The rate of cost per mile traveled was 10.94 cents, the same being a decrease of 0.01 cent, or .09 per cent. As to the rate of cost per mile of length, which was \$81.75, there was an increase of \$3.89 or 4.99 per cent. The average number of trips per week was 7.18, which was an increase of .35, or 5.12 per cent.

While there has been an increase of over 11 per cent. in the number of miles of star service traveled per annum during the last nine years, there was a decrease in the annual rate of expenditure therefor of nearly 7 per cent. In the steam-boat service there has been a decrease in the same period of over 17 $\frac{1}{2}$ per cent. in miles traveled and a decrease of over 24 per cent. in the annual rate of expenditure, with a decrease of over 8 per cent. in the cost per mile.

During the year the total number of pieces of postage-stamps and stamped paper was 2,818,565,321, of the aggregate value of \$52,921,784.17, an increase in number over the fiscal year ended June 30, 1888,

of 117,930,151 and in amount of \$2,285,462.33, the former being 4.33 per cent. and the latter 4.51 per cent. The decrease shown in the issue of newspaper wrappers is attributable chiefly to the practice of publishers in including occasional papers in their regular second-class mails at pound rates and to the circumstance that the present size and shape of the 1-cent wrapper are unsuitable for large packages now very frequently sent under the reduced-postage rate of 1 cent for 4 ounces. The continued unpopularity of the letter-sheet envelopes is shown by the decrease of over 62 per cent. in both the number and value of those issued.

The total number of pieces of mail of all kinds registered during the year was 14,061,866, an increase of 384,697, or 2.8 per cent. There was a corresponding increase of \$25,928.10, or 2.3 per cent. in amount of registry fees collected. The ascertained losses were 715, and the estimated losses, allowing for the same proportion in outstanding as in closed cases of investigation, are placed at 435, making an estimated total of 1,150, or one in every 12,227 registered pieces handled. The volume of mail matter registered for which postage was paid has increased in the twelve years over 213 per cent.

The total weight of mails dispatched by sea to foreign countries was 4,111,852 pounds, of which 683,131 pounds consisted of letters and postal-cards and 3,428,721 pounds of other articles. Over 89 per cent. of the former and 74 per cent. of the latter were destined for transatlantic countries, and of the transatlantic mails 42 per cent. of the letters and 50 per cent. of the other articles were for Great Britain alone, while about 20 per cent. of each was intended for Germany. The increase in weight of the transatlantic letter mails was 32,497 pounds, or about 5.59 per cent., and of other articles for transatlantic countries 278,061 pounds, or 12.30 per cent. The increase in foreign mails for other destinations was 7,021 pounds of letters and postal-cards, or 11.24 per cent., and of other articles 127,668, or 16.73 per cent. The aggregate increase of letter mails was 6.14 per cent., and of other articles 13.42 per cent. Vessels of United States registry received \$1.60 per pound for letters and postal cards and 8 cents per pound for other articles, while vessels of foreign registry are paid but about 44 cents for letters and postal-cards and about 4½ cents for other articles.

The gross amount of compensation paid for transatlantic service was \$379,642.68, all of which was paid to vessels of foreign registry, except the insignificant sum of \$1.10 to the American line for carrying 311 grams=11 ounces of letters. For trans-Pacific service there was paid to vessels of United States registry \$52,821.73, and to vessels of foreign registry \$6,741.38, while for miscellaneous services vessels of United States registry received \$57,006.31, and vessels of foreign registry \$10,199.55. The total cost of the transatlantic service was \$379,642.68, of the trans-Pacific service, \$59,563.11, and of the miscellaneous service, including Canada, Mexico, Central and South America, and the West Indies, \$67,205.86.

There was paid the Panama Railroad Company the sum of \$8,989.49, to which should be added the amounts paid to steam-ship companies for the sea conveyance of closed mails of foreign origin, and to foreign countries for the intermediary transit of closed mails of United States origin, as well as for open mail matter of United States origin, and likewise the expense of the postal agencies at Panama and Shanghai, and of this Department's share of the maintenance of the International Postal Bureau of Berne, together aggregating \$172,141.36, making the total cost of the service \$687,542.50. From this amount there must be deducted the amount received by the United States Department for the intermediary transit of closed mails of foreign origin; for intermediary transit of open mail matter of foreign origin, and the amount collected as box rents at the postal agency at Shanghai, amounting together to \$166,204.47. The actual net cost of the service is therefore \$521,338.03.

The Superintendent of the Dead Letter Office makes the gratifying exhibit that there was a decrease of 10,983 pieces of mail matter as compared with the number received during the preceding fiscal year. The total number of pieces treated in this branch of the Department was 6,479,293. Of the total number 5,494,225 letters were opened, and 170,870 were delivered unopened, while 261,956 ordinary letters without valuable inclosures, which have been sent to the writers and returned on account of failure to deliver, were destroyed; 542,736 foreign letters and parcels were returned to the country of their origin or delivered to the addressees. Of the letters opened in the Dead Letter Office, 2,096,497 were delivered, and of these 1,838,768 contained nothing of value, the remainder having inclosures of money, drafts, miscellaneous papers, photographs, etc. Seventy-five thousand one hundred and seventy-five letters and parcels failed of delivery and have been filed subject to reclamation, and 3,527,504 were destroyed.

The total value of the inclosures of letters returned to owners or in course of restoration is \$1,534,909.12, and the revenue derived from dead mail matter, comprised of the amount separated from dead letters that could not be restored to the owners, and the amount realized from the annual auction sale of parcels of merchandise, which could not be restored, was \$12,103.72, while \$1,943.07 worth of postage-stamps were destroyed under supervision. Magazines, pamphlets, illustrated papers, etc., to the number of 17,188, the owners of which could not be found, were distributed among the various hospitals and charitable institutions of the District.

THE NEW CLASSIFICATION.

The administration of the Post-Office Department was greatly embarrassed at the outset in putting into operation the act of March 2, 1889, which related to the re-adjustment of the duties and the salaries of clerks in the larger post-offices. The law required the classification to take effect July 1, and while it raised the salaries of the lower grades, it failed to make adequate appropriation for the same, in con-

sequence of which the salaries of many of the officials of the higher grade had to be reduced to the minimum sum named when faithfulness and training called for an increase to the maximum. Some of the good clerks have been lost to the service because the salaries were not sufficient to retain them. Certain modifications and amendments of the act will be needed to adjust the scheme to the entire service, and it is quite apparent that the Inquiry Division, which was abandoned in the new classification, should be restored.

LOTTERIES AND THE MAILS.

The inability of the Postmaster-General under the existing laws to successfully carry out the evident intent of the statutes by excluding letters and circulars relating to lotteries, gift enterprises, and other similar swindling schemes from the mails is apparent. Congress and the country are familiar with the several attempts of my predecessors to suppress these evils. It is not necessary, therefore, to review their action in detail, as a brief allusion thereto will present the existing relations of the Department to these schemes.

An official order of November 13, 1879, forbade payment of postal money-orders drawn to the order of M. A. Dauphin, intended for the Louisiana Lottery Company (which company is the principal operator in these fraudulent enterprises), and directed the return to the senders of all registered letters addressed to him. Suit was brought against General Key by said Dauphin in the court of the District of Columbia to enjoin the execution of said order, and an appeal was taken to the Supreme Court of the United States. Pending this appeal General Key, under date of February 27, 1880, issued another order suspending the one of the first-named date, and afterwards, before the determination of the suit, retired from the office of Postmaster-General. It is understood that this retirement terminated the suit under a rule of the Supreme Court which intercepts the prosecution of appeals in cases where the exercise of a mandatory power would reach a person no longer in office.

No action was taken to revive the order alluded to until September 20, 1883, when the Postmaster-General, by official order, directed that "in pursuance of the finding of Postmaster-General Key (as to the fraudulent character of this concern) * * * *all postmasters* be, and they are hereby, forbidden to pay money-orders drawn to the order of M. A. Dauphin," and, also, to return to remitters registered letters addressed to him.

This order has ever since been observed and is still observed by the postmaster at New Orleans, who returns in accordance therewith all such mail as comes to his office so addressed. But the Louisiana State Lottery Company resorted to the expedient of advertising that remittances could be made to the New Orleans National Bank, and they are so made to a surprising and almost unlimited extent. To circumvent

this evasion of the law the Postmaster-General, under date of September 19, 1883, ordered the postmaster at *New Orleans* to withhold the delivery of registered letters so addressed, and to not redeem money-orders payable to said bank, but to deal with such mail as he did with similar matter addressed to Mr. Dauphin. Thereupon the bank instituted suit for injunction to restrain the postmaster from executing said order. In disposing of the preliminary injunction the court intimated very plainly that the order was of doubtful validity and force because it was an attempted revival of the order of a former Postmaster-General, which he had himself suspended.

All through the ruling of the court in this case there was outlined a doubt of the power of the Postmaster-General to withhold the delivery of registered letters and the payment of money orders drawn to the order of any person engaged in conducting a fraudulent lottery scheme, although he might be convinced by "evidence satisfactory to him" that such schemes were of the character named, and that the mails were being prostituted to their use. The law was presumed to lodge the whole question within his judgment and discretion, and to make his decision thereon final and conclusive. But the doubt raised suggests the propriety, if the evil under discussion is believed to be demoralizing, of so amending the statute as to declare all lotteries and schemes of all kinds for the distribution of money or property of any sort by lot, chance, or drawing of any kind *fraudulent*, and to prohibit the delivery of registered letters and the payment of remittances by money orders to persons, firms, corporations, or banks conducting them, and to make, by provisions so plain as to leave nothing to construction, the judgment of the Postmaster-General on these points conclusive.

It is conceded that Congress has the power to regulate by law what shall and what shall not be carried in the mails, and its enactments in this regard are final and conclusive. If, as is not doubted, its authority goes to this extent, it follows that it may designate some official to execute the law, and it is equally clear that it would be justified in closing the mails against *all* schemes that propose to distribute prizes by lot or chance, and whether they be sanctioned or not by State laws and constitutions. Congress has already shown its belief in the existence of its power, and manifested its willingness to suppress evils of this kind by striking the word "illegal" from section 3894, Revised Statutes, which declared letters and circulars concerning such lotteries, etc., non-mailable, so as to make the prohibition applicable to all lotteries, whether illegal or otherwise. This salutary enactment if now followed by striking out the word "fraudulent," and like words and phrases, from other sections regarding registered mail and money orders, will relieve the Postmaster-General in the exercise of his discretion.

I further suggest that the provisions of law applicable to individuals conducting lotteries should be extended to their agents and to all agencies acting for them, so as to exclude the latter from the right of

receiving registered and money-order letters the same as their principals. It needs no argument to show that the New Orleans National Bank (notwithstanding it holds its charter from the United States and is presumptively obligated to assist in upholding its laws) is as fully identified with the Louisiana State Lottery as is Mr. Dauphin himself. He advertises that certain remittances for the purchase of chances in the prizes announced by the lottery concern should be sent to the bank. The bank accepts and collects them, and the relation of principal and agent is thereby clearly shown. Why should the Postmaster-General not be specially authorized by law to deal with any bank as he does with the acknowledged representative of the lottery? It is no answer to say that the right of a bank to conduct its legitimate business through the mails in this form would be abridged. That argument applies with equal force to any other institution and individual, and all the wrong thus done to it can be easily cured by its renunciation of its connection with the lottery and by declining to receive mail intended for it.

Thus far I have referred only to such mail as bears the evidence of its character on its face. Ordinary letters are of a different order, and their contents can not be inspected to ascertain if they come within the prohibitory provisions of the law. Such letters go and must continue to go unquestioned in the mails for the sanctity of the seal can not and should not be violated. But I suggest the consideration by Congress of its constitutional right to provide by law for the jurisdiction over the offense by the courts at offices of delivery the same as at the office of mailing, thus making the offense continuous between the office of mailing and that of delivery, and enlarging the opportunity to convict. It is difficult to prosecute to conviction any offender against the law concerning lotteries in a community so closely identified with lottery concerns as are the people of Louisiana, whose State constitution authorizes the granting of lottery charters and privileges, and whose legislature in conformity therewith has granted such charter to the Louisiana State Lottery. It is believed that if the courts in other States to which lottery letters are sent by mail from New Orleans or elsewhere were permitted to try alleged violations of the laws concerning lotteries that evidence could be easily obtained of the mailing and of the transmission by mail of ordinary letters of this character, and conviction therefor would become more frequent and certain.

FREE CARRIAGE OF GOVERNMENT MATTER.

The postal system was organized upon the theory that the cost of doing the work should be borne directly by those who should make use of the service. To this end, the relations of revenue and expense have always been regarded as the chief factor in determining the rates of postage. From motives of public policy, the wisdom of which I am not prepared to dispute, concessions have ever been made to the public

press; but still it has been held by the advocates of a self-sustaining service that the charges on other classes of mail matter should be so adjusted as to cover any deficiency that might arise from the carriage of printed matter.

The tendencies of recent years have been in favor of cheap postages, and to secure good service the people have shown their approval of the granting of needed sums from the Treasury to meet deficiencies in the postal revenues.

As a partial offset to the deficiencies, it is well to call attention to the fact that the postal service is called upon to sustain a burden which is almost entirely lost sight of by the general public. This arises from the carriage in the mails free of postage of matter for the Government. Not only are great quantities of documents sent free by the legislative branch, but all the executive departments are permitted to use the mails for official purposes without the payment of postage. The privilege is not confined to officials in Washington, but extends to the entire mass of subordinate officers and agents throughout the country. Neither is it restricted to mere official correspondence, but is made to include supplies and bulky articles of great variety. The result is that the mails are loaded with a vast quantity of matter for which not a penny of revenue is received, and which imposes on the postal service the same cost for transportation and handling as a like quantity of matter carried for the public.

When the franking privilege was repealed in 1873 provision was made for compensating the postal service for the carriage of official matter for the executive departments through the use of special stamps, which were issued by and credited to the Post-Office Department. The amount of revenue realized from this source during the year ending June 30, 1874, was \$1,759,301.86; but I am informed that the stamps were used only for official correspondence, and that the larger proportion of matter (the supplies and other heavy articles) was sent free of postage under a printed form of official certificate, signed by the officer making use of it.

With the increase of the business of the Government since 1874, I am satisfied that a fair return for the carriage of Government matter, charged at like rates as matter carried for the public, would yield not less than five or six million dollars in postage. Prior to the repeal of the franking privilege and the introduction of official stamps, a gross sum was appropriated annually by Congress to be placed to the credit of the Post-Office Department for the carriage of official matter; but this appropriation was not renewed upon the discontinuance of the official-stamp system a few years later. It would seem to be only just that the credit side of the balance-sheet of the Department should contain an item to offset the cost of the work which is charged among the expenditures on the debit side of the sheet.

If the present system of penalty envelopes for the use of the Departments is to be continued, I would suggest the adoption of a uniform style of envelope to be used by all the Departments and their subordinate agencies. The envelopes should be of a distinctive character; they should be made of paper bearing a Government water-mark and be impressed with some form of special device in addition to the printing now required by law, which can be easily counterfeited. This plan would necessitate the employment of some central agency (perhaps the Post-Office Department would be the more appropriate one) for procuring and issuing envelopes to those entitled to use them.

The plan would have incidental advantages in leading to the adoption of standard sizes and kinds, in place of the present infinite varieties, which are believed to owe their existence fully as much to caprice as to necessity or convenience. And the procurement of greater quantities by the same purchasing power, together with the restriction to fewer styles, would most assuredly lead to a great reduction in the aggregate cost of the supplies. It would also enable the Government to keep an account of the number of envelopes manufactured and furnished, which is not possible under the present system. I earnestly commend the subject to the consideration of Congress.

DEFECTS OF LAW GOVERNING SECOND-CLASS MATTER.

The press has become the leading contributor to the volume of the mails. The specially favored class are newspapers and periodical publications issued by known offices of publication and sent by publishers or news agents to regular subscribers or news agents. These are designated as second-class matter, and postage is chargeable at 1 cent per pound. When circulated within the county of publication, this matter is entitled to transmission free of postage. The total quantity of second-class matter carried in the mails during the last fiscal year was about 95,000 tons, of which upwards of 14,000 tons were sent free of postage. The receipts from second-class matter amounted to \$1,616,351.27, or only 2.9 per cent. of the entire postal revenue.

The class next in favor are books, circulars, and other miscellaneous printed matter. These are styled third-class matter; and they are subject to a charge for postage of 1 cent for each 2 ounces or fraction thereof. To realize the benefit of the cheaper rate of postage, a fertility of expedients has been developed to evade the law and to secure the admission to the second class of matter which properly belongs to the third class. The success attending such efforts may be indicated by the fact that during the past three years the average annual rate of increase of revenue from second-class matter was 13.7 per cent., as against an average annual increase of 8.17 per cent. in the remainder of the postal revenue, derived in the greatest part from postages on the other classes of matter. The effects are not only hurtful to the postal

revenue, but they are opposed to the interests of legitimate journalism. The principal evils calling for a remedy are the following :

MAILING OF BOOKS AS SECOND-CLASS MATTER.

The revenue suffers a serious loss through the evasion of the law by which certain publishers secure admission to the mails as second-class matter of paper-covered volumes issued in complete form as books, but under the semblance of periodical publications. Through this evasion, carriage is secured at 1 cent per pound, instead of 1 cent for each 2 ounces, the rate for third-class matter, to which class the books in question properly belong. The means by which this is effected is a nominal compliance with the conditions of the law governing the admission of publications to the second class, which conditions are substantially as follows :

- (1) That the publication shall be issued periodically not less than four times a week, shall bear date of issue, and be numbered consecutively.
- (2) That it must be issued from a known office of publication.
- (3) That it must be printed on sheets of paper, and be not bound in cloth, leather, or other substantial binding.
- (4) That it must be originated and issued for the dissemination of information of a general character, or in the interests of literature, science, art, or some special industry.
- (5) That it must have a legitimate list of subscribers.
- (6) That it shall not be designed primarily for advertising purposes, or for free circulation, or for circulation at nominal rates.

The precise manner in which these conditions are complied with is shown by the following examples, which are parallelisms of cases actually occurring: A publisher in Boston makes application to the Department for the admission to the mails as second-class matter of what he terms the "Blank Library," stating in the form of application that the Library is to be issued quarterly, that it is to be devoted to the science of law, and that it has a bona fide list of subscribers; and he submits, as the first number of the Library, "Story's Conflict of Laws," so entitled and headed throughout, but bearing an extra title-page and a stiff paper cover, containing the designation "Blank Library, No. 1, Vol. 1," the date of issue, the office of publication, and the price of subscription. Upon this showing of facts the Blank Library is entered as second-class matter, and the publisher continues his issues with "Adams on Equity," "Sharswood's Blackstone," and any other law books that he may for the time being find it profitable to issue in this way. It may be well to say that these books are all so prepared that the purchaser can have them bound in the customary law binding at his pleasure, without any mutilation of them.

Another publisher, in New York, desiring to issue a series of novels, adopts as a general designation of them the "Blank Series," devoted to literature, makes application in the same way as the law publisher, gets the series entered as second-class matter, and then goes on to issue a multitude of books of fiction, differing in no respect from other paper-covered books, except that they are designated the "Blank Series," and bear a number and date of issue, besides professing to be issued to regular subscribers. With regard to this latter point, there is some room for doubt as to whether any of these libraries or series have a bona fide list of subscribers, that is to say, subscribers who send in the subscription price for a year or any part of a year, except that comprehended by a single issue of the publication, the publisher very probably counting as subscribers retail dealers who buy of him just as they buy of other publishers, without any reference to regular subscription. I have some reason to believe, too, that there is little or no regularity in the issue of the publications; the publisher in reality suiting his own convenience as to the frequency of issue after he gets the publication officially entered.

This practice has, it seems, been in existence some nine or ten years, beginning, I understand, with a few publishers who mailed but a comparatively small number of books, and increasing year by year until the number of publishers availing themselves of the looseness of the law and its very liberal interpretation by the Department is now very considerable. These publishers represent nearly all the great cities of the country, and they mail annually an astounding aggregation of books. It must be borne in mind, also, that not only are these books mailed as periodicals in the first instance from the publishing house, but they are transmitted over and over again through the mails by newsdealers throughout the country, every one of whom is entitled to mail at the same rate as the publisher.

I am well satisfied that this practice involves a gross abuse of the law, which beyond all question never could have been intended to admit to the mails at a cent a pound the "Adventures of Claude Duval," merely because it purports to be a part of some series or pretended series of books and bears a paper cover, while "Butler's Analogy" or "Newton's Principia" or "Webster's Spelling Book" is chargeable with postage at eight times that rate because bound in cloth and issued without alleged connection with any other works.

Besides its illegality it brings about an unfair discrimination against publishers whose convenience does not allow the issue of single works at stated periods, or whose conscience, or good taste, or whatever else may be the animating motive, will not allow them to resort to this class of business to benefit themselves at the expense of the Government.

If it be asked why, feeling as I do concerning this, I have allowed it to continue, and even to increase, the answer is that the length

of time the practice has lasted gives it some claim to recognition, and that the great number of additions to it officially authorized before my entrance into office prevents the exclusion of new claimants without manifest unfairness. Under all the circumstances I feel it to be only proper that I should present the case, and urgently ask that Congress be called upon to provide a remedy.

SAMPLE COPIES.

By law publishers are permitted to mail sample copies of their publications to indiscriminate addresses at the rate of postage charged on second-class matter sent to regular subscribers. There is no limit fixed to the number of sample copies which they are privileged to send, and it often happens that the mails are burdened with a vast number of samples of publications which, by a technical compliance with the requirements, have been admitted as second-class matter, but which in reality were designed as mere advertising mediums issued to a scanty subscription list. This list has been encouraged, and in some instances made up by an offer of premiums of not less value than the price of subscription. It is not unusual for the number of sample copies to exceed by many times the number sent to subscribers, and frequent instances have come to the knowledge of the Department where advertisements have been solicited and secured upon the guaranty of the publishers to mail extra large editions of sample copies.

The mere fact that unusual quantities of sample copies are being circulated is not conclusive upon the question of legitimacy; and it can only be taken into account in connection with other circumstances in determining the true character of the publication. This determination, however, can be reached only by special investigation, and after much mischief has been wrought by publications found not to be entitled to the privileges which they had secured. It would seem to be proper to restrict the number of sample copies to a fair proportion of the actual subscription list; and this would almost certainly have a beneficial effect of deterring the publication of many advertising sheets which are issued mainly because of the advantages offered for circulation at a low rate of postage.

RATE OF POSTAGE ON RETURNED SECOND-CLASS MATTER.

In connection with the mailing of newspapers and periodicals by publishers and news-agents, a peculiar and rather unfair condition of things exists, which, being due to the present wording of the law in relation thereto, and not to mere postal regulation, I have found it beyond my power to remedy. The case is this: Under the act of Congress of March 3, 1885, the right to mail second-class or newspaper and periodical matter at the rate of a cent a pound is given to publishers when sent from the offices of publication, and to news-agencies "when sent to actual subscribers thereto or to other news-agents."

Now, so far as the original mailing of this class of matter is concerned, there appears to be no unjust inequality in the rights bestowed by the law quoted, as between publishers and news agencies; but in the mailing of the matter by agents *back* to publishers and news agencies—and this, owing to a very general custom now prevailing in the publishing business of allowing dealers to return for credit on their accounts unsold copies of publications sent them, has grown to very considerable proportions—a discrimination is made which results unfavorably to the publisher, and therefore to the advantage of competing news agencies; That is to say, if the dealer or agent (for under the uninterrupted practice of the Department these two terms are synonymous) who returns the unsold matter sends it to a news agency or company he pays postage at the usual pound rate chargeable on matter sent from one news-agent to another; but if he returns unsold matter to a publishing house not a news agency he is charged postage at the same rate as that charged the general public, namely, 1 cent for every 4 ounces, payable by stamps attached.

This discrimination, which at first blush seems rather absurd, and which has caused considerable complaint among publishers, has the high sanction as to its legality of the late Assistant Attorney-General for this Department, whose opinion, ever since it was given, has been strictly followed by all postmasters.

I am not prepared to question the legal correctness of this decision especially as it has received the approval of my two immediate predecessors, both of them distinguished lawyers. But I am inclined to think that such a discrimination, being unjust in principle, was never intended by Congress, and I am convinced that it ought not to be permitted to exist. I would not, however, have it removed by extending the privilege enjoyed by news agents under it, so as to allow them to return their unsold matter at the pound rate to publishers as well as news companies; but I would have the privilege curtailed, so as to require payment of postage on all returned second-class matter at the rate which the public is required to pay—1 cent for every 4 ounces or fraction thereof—for surely the right to one mailing of this class of matter at the merely nominal rate of postage prescribed by law is sufficiently liberal to satisfy the most exacting believer in the expediency of low rates. I accordingly recommend that the act of Congress above referred to be amended by the passage of a provision similar to the following:

That all unsold or undelivered second-class matter, after its original mailing at the pound rate of postage, when returned by mail to publishers, news-agents, or others, shall be chargeable with postage at the rate of 1 cent for every 4 ounces or fraction thereof, payable by stamps attached thereto.

STATEMENTS OF FINANCIAL OPERATIONS.

The following statements show the revenue, the expenditures, and the actual cost of the postal service for the years ending June 30, 1887, 1888, and 1889—the difference between the expenditures and the actual cost of the service being made up of the amounts earned by the Pacific Railroad Companies for mail transportation, and certified to the Secretary of the Treasury under act of Congress.

FISCAL YEAR ENDING JUNE 30, 1887.

REVENUE.

1. Ordinary postal revenue.....	\$48, 118, 273. 94
2. Revenue from money-order business.....	719, 335. 45
Gross receipts.....	48, 837, 609. 39
Add amount gained by "suspense" accounts.....	23, 566. 80
Makes total revenue	48, 861, 176. 19

EXPENDITURES AND LIABILITIES.

Expenditures:

From July 1, 1886, to September 30, 1887.....	\$52, 391, 677. 43
From October 1, 1887, to September 30, 1888	368, 160. 40
From October 1, 1888, to September 30, 1889	55, 712. 25
	52, 815, 550. 08

Liabilities:

Estimated amount of outstanding indebtedness for various objects on account of the year.....	\$5, 529. 50
Amount due for transportation on Central Pacific Railroad, not included in amount certified under the law to the Secretary of the Treasury.....	289, 468. 00
Amount due Sioux City and Pacific Railroad Company for similar service during the year	6, 126. 09
	301, 123. 59

Total expenditures and liabilities for the service of the year ..	53, 116, 673. 67
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Deficiency in revenue	4, 255, 497. 48
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COST OF POSTAL SERVICE.

Amount of expenditures and liabilities, as above	\$53, 116, 673. 67
Amount certified to the Secretary of the Treasury for credit to Pacific railroads—	
From July 1, 1886, to September 30, 1887.....	\$1, 187, 027. 33
From October 1, 1887, to September 30, 1888	11, 241. 72
From October 1, 1888, to September 30, 1889	250. 78
Total amount certified	1, 198, 519. 83
Total cost of service	54, 315, 193. 50
Excess of total cost of postal service over revenue.....	5, 454, 017. 31

The receipts were \$4,255,497.48, or 8 per cent. less than the expenditures and outstanding obligations, and \$5,454,017.31, or 10 per cent. less than the total actual cost of the service.

Compared with the previous fiscal year, there was an increase of \$4,924,927.49, or 11.2 per cent., in the gross revenue; an increase of \$2,013,830.45, or 3.9 per cent., in the expenditures and liabilities; and an increase also of \$2,099,678.28, or 4 per cent., in the total cost of the service.

FISCAL YEAR ENDING JUNE 30, 1888.

REVENUE.

1. Ordinary postal revenue.....	\$51,896,858.96
2. Receipts from money-order business.....	798,317.83
Gross revenue.....	<u>52,695,176.79</u>

EXPENDITURES AND LIABILITIES.

Expenditures:

From July 1, 1887, to September 30, 1888	\$55,795,357.84
From October 1, 1888, to September 30, 1889	490,073.70

56,285,431.54

Liabilities:

Estimated amount of outstanding indebtedness for various objects on account of the year.....	\$1,146.82
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Amount due for transportation of mails on Central Pacific Railroad, not included in amount certified under the law to the Secretary of the Treasury.....	308,450.55
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Amount due Sioux City and Pacific Railroad Company for similar service during the year.....	10,703.64
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\$320,301.01

Total expenditures and liabilities for the service of the year...	<u>56,605,732.55</u>
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Deficiency in revenue.....	<u>3,910,555.76</u>
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COST OF POSTAL SERVICE.

Amount of expenditures and liabilities as above	\$56,605,732.55
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Amount certified to the Secretary of the Treasury for credit to Pacific railroads from July 1, 1887 to September 30, 1880	\$1,240,600.83
From October 1, 1888 to September 30, 1889.....	1,507.20

Total amount certified	<u>1,242,108.03</u>
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Total cost of service	<u>57,847,840.58</u>
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Excess of total cost of postal service over revenue	<u>5,152,683.79</u>
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The receipts were \$3,910,555.76, or 6.9 per cent. less than the expenditures, and \$5,152,663.79, or 8.9 per cent. less than the total cost of the postal service.

Compared with the previous fiscal year, there was an increase of \$3,834,000.60, or 7.8 per cent., in the gross revenue; an increase of \$3,489,058.88, or 6.5 per cent., in the expenditures and liabilities; and an increase also of \$3,532,647.08, or 6.5 per cent., in the estimated total cost of the service.

FISCAL YEAR ENDING JUNE 30, 1889.

REVENUE.	
1. Ordinary postal revenue	\$55,387,806.37
2. Revenue from money-order business	787,804.81
Gross receipts	56,175,611.18
Less amount charged to bad debts, compromise, and suspense cases..	27,596.26
Leaves net revenue	56,148,014.92

EXPENDITURES AND LIABILITIES.

Expenditures:

Amount expended to September 30, 1889, on account of the year ending June 30, 1889..... \$61,376,847.24

Liabilities:

Amount of indebtedness for various objects certified to Auditor and not yet reported for payment..... \$587,968.62

Estimated amount of indebtedness not yet reported to Auditor (railroad service) 200,000.00

Amount due for transportation on Central Pacific Railroad, not included in the amount certified under law to the Secretary of the Treasury..... 321,077.25

Amount due Sioux City and Pacific Railroad Company for similar service during the year..... 12,305.24

1,121,351.11

Total actual and estimated expenditures for the service of the year..... \$62,498,198.35

Deficiency in revenue 6,350,183.43

COST OF POSTAL SERVICE.

Total actual and estimated expenditures, as shown above \$62,498,198.35

Amount certified to the Secretary of the Treasury by the Auditor for transportation of the mails on the Pacific railroads 1,253,673.33

Total estimated cost of service for year..... 63,751,871.68

Deduct amount of net revenue as shown above 56,148,014.92

Leaves excess of estimated cost of service over amount of net revenue 7,603,856.76

The difference of \$1,253,673.33 between the deficiency of revenue and the cost of the service is represented by the amounts certified to the Treasury on account of service on the Pacific railroads, which by law is not made payable out of the appropriations for the postal service.

The gross receipts were \$5,228,832.32, or 8.5 per cent., less than the actual disbursements on account of the year; \$6,350,183.43, or 10.1 per cent., less than the disbursements and liabilities of the year; and \$7,603,856.76, or 11.9 per cent., less than the estimated total cost of the service, which, as before stated, includes the amount certified to the Secretary of the Treasury as the earnings for mail transportation on the Pacific railroads.

Compared with the previous fiscal year there was an increase of \$3,452,838.13, or 6.5 per cent., in the gross revenue of the service; an increase of \$5,892,465.80, or 10.4 per cent., in the disbursements and outstanding liabilities; and an increase also of \$5,904,031.10, or 10.2 per cent., in the estimated total cost of the service.

The estimates submitted to Congress in the report of the Postmaster-General for 1887 for the service of the year ended June 30, 1889, placed the expenditures for the latter year at \$58,967,233.74, the gross revenue at 57,563,734.32, and the deficiency of revenue to be supplied out of the general Treasury at \$1,403,499.42.

As will appear from the foregoing exhibits, for the year the actual expenditures and estimated liabilities were \$3,530,964.61 in excess of the original estimate; the revenue was \$1,415,719.40 *less* than the estimate; and the present estimated deficiency of revenue to be supplied out of the general Treasury is \$4,946,684.01 *more* than that shown in the estimate made in 1887.

ESTIMATES FOR THE FISCAL YEARS ENDING JUNE 30, 1890 AND 1891.

The ordinary postal revenue for the fiscal year ending on the 30th June last showed an increase over that of the previous year of 6.7 per cent. This was somewhat less than the usual gain, the average annual rate of increase for the three years up to July 1, 1889, being 8.3 per cent. Returns from thirty of the largest post-offices for the quarter ending September 30 last (the returns from all the post-offices for that quarter not yet having been audited) show an increase of 9.6 per cent. over the revenue of the corresponding quarter of 1888. Special returns called for by this office for the same post-offices for the month of October just past exhibit an increase of 9.2 per cent. over the revenue of October for the previous year. From past experience, the remaining offices are not likely to show as great an increase as the large offices; but unless there should be unforeseen changes in the present condition of the business industries of the country, it will be proper to calculate on an annual increase of 8 per cent. (or 1 per cent. less than called for

by the estimates of last year) at all the post-offices. Upon this basis the revenue may be estimated as follows, viz:

FISCAL YEAR ENDING JUNE 30, 1890.

Amount of ordinary postal revenue for the year ending June 30, 1889.	\$55,387,806.37
Add increase of 8 per cent.....	4,431,024.50
Gives estimated amount of ordinary postal revenue.....	59,818,830.87
Amount of estimated revenue from money-order business.....	800,000.00
Gross revenue for the year.	60,618,830.87

The appropriations for the service of the year amount to \$66,605,344.23; and it is estimated that, in the light of present information, additional appropriations will be required of \$179,117 for compensation to postmasters; of \$923,430.24 for inland mail transportation by railroad; and of \$20,000 for mail transportation by steam-boat, making a total of \$1,122,547.24. The pay of postmasters is regulated by law, which fixes the rates to be allowed, and the expenditure is, therefore, not controlled at the discretion of the Department. The law also regulates the rates of compensation allowed for the transportation of the mails by railroad.

Upon the foregoing basis the account for the current fiscal year may be stated as follows:

Amount of appropriation	\$66,605,344.28
Estimated deficiency appropriation required	1,122,547.24
Total.....	67,727,891.52
Estimated gross revenue	60,618,830.87

Estimated deficiency of revenue to be supplied out of general Treasury	7,109,060.65
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The estimates submitted by the report of the Postmaster General in 1888, for the service of the year ending June 30, 1890, were as follows:

Amount of estimated expenditures.....	\$66,812,073.02
Amount of estimated revenue	62,508,658.12
Estimated deficiency of revenue.....	4,303,414.90

In the foregoing estimate, the amount of the necessary appropriations for the current year is placed at \$915,818.50 less than that now shown to be required; the amount of revenue is placed at \$1,889,827.25 more than that in the present estimate; and the deficiency of revenue to be supplied out of the general Treasury is placed at \$2,805,645.75 less than the amount which now seems to be required.

In other words, in the report of 1888, the revenue for 1890 was over-estimated in the sum of \$1,889,827.25 and the expenditures were under-estimated in the sum of \$915,818.50, making the apparent deficiency of revenue \$4,303,414.90 when present information shows that it is likely to be \$7,109,060.65.

FISCAL YEAR ENDING JUNE 30, 1891.

Estimated amount of ordinary postal revenue for year ending June 30, 1890, as before.....	\$59,818,830.87
Add increase of 8 per cent.....	4,785,506.47
Gives estimated amount of ordinary postal revenue for this year....	64,604,337.34
Amount of estimated revenue from money-order business.....	810,000.00
Gross revenue for the year.....	65,414,337.34

ESTIMATED DEFICIENCY OF REVENUE.

The estimated deficiency of revenue to be supplied out of the general Treasury is as follows:

Amount of estimated expenditures, payable out of appropriations, as per table of estimates	\$72,434,698.99
Estimated gross revenue, as above.....	65,414,337.34
Leaves estimated deficiency.....	7,020,361.65

The foregoing estimates contemplate that 9.6 + per cent. of the expenditures shall be paid out of the general Treasury. The actual deficiency should, however, be less than the sum given, because, first, the revenue may exceed the estimate, and second, there should be margins left of some if not all the items of appropriation, it being impossible to estimate the expenditures with entire accuracy. During the last fiscal year the net amount of unexpended balances of appropriations was \$716,545.55, which amount is subject to reduction to satisfy outstanding liabilities.

The estimated deficiency of revenue to be supplied out of the Treasury for the next fiscal year is \$88,699 less than that shown in the foregoing estimate for the current fiscal year.

SPECIAL TOPICS.

To conclude I beg to mention some smaller but hardly less important topics for your consideration. A double postal-card for return answers is entirely feasible if authority could be given for its issue. Another question is the establishment of a postal museum. There is now scattered throughout the country much historic material in the shape of ancient mail equipments, implements, pictures, and articles of various kinds, in use during the century. If this could be collected and arranged it would form an interesting epitome of the growth of the postal system. Scores of post-offices have in their possession valuable relics which could be had for deposit in a departmental museum. The cost would be trifling, while the interest would be very great. A beginning could be made with an appropriation of \$1,000.

The shabby and inadequate fixtures in many of the post-offices are not fit to represent the United States Government, and do not conduce to an efficient service; neither is the mail safe in hundreds of offices,

and for this reason labor is thrown upon the Department to trace missing matter that would never have been lost if ordinary protection had been given. It is respectfully suggested that the Postmaster-General be authorized to establish a standard of fixtures for each class of offices, and that the postmaster be held strictly to account in the maintenance of office furniture in its proper condition. I trust that the day is not far distant when the Government will provide fixtures for offices of all classes, even though the salary of the postmaster be affected thereby. Even so the postmaster would be better off than now, compelled as he is to rent the fixtures from the manufacturers, or buy them from the retiring postmaster. The latter course has been the cause of transactions not creditable to the parties concerned or the system that permits the temptation to exist.

By inadvertence many letters find their way to the post-offices without postage stamps. The writer is notified and the notice must be returned with a stamp which requires another stamp for forwarding. The delay is often attended with grave consequences, and the time of the Department clerks is unnecessarily taxed by the present system. The reason given for the plan now in operation is that there was no check upon the postmaster to make sure that the postage was collected. The introduction of the postage-due stamp fully covers the case, and there is no reason why so much trouble and tedious delays should continue. Authority is therefore asked for the Post-Office Department to forward promptly all letters not prepaid and collect double postage.

Very respectfully, your obedient servant,

JOHN WANAMAKER,
Postmaster-General.

P A P E R S
ACCOMPANYING
THE REPORT OF THE POSTMASTER-GENERAL.

REPORT OF THE TOPOGRAPHER OF THE POST-OFFICE
DEPARTMENT.

* * * * * * *

GENERAL DUTIES OF THE TOPOGRAPHER'S OFFICE.

The general duties of this office may be referred to the following three distinct or separate divisions:

1. *Construction of new maps.*—The map work consists in the construction (projection and compilation) of the original drawings of the post-route maps of the general edition to replace old, worn-out, and inaccurate maps, and the tracing and lettering of the same for photolithography; preparing special drawings of enlarged sub-maps of the environs of the principal cities, where the territory embraced in these special drawings is overcrowded on the general edition of post-route maps; preparing sample diagrams of special editions of States and Territories for the Railway Mail Service, for the use of the employés of that service, exhibiting the railway postal lines and their connecting side mail routes; examining and testing the correctness of all new photolithographic maps received from the contractors.

2. *The preparation of the successive editions of printed post-route maps of the United States.*—In the preparation of the successive bi-monthly editions of the sheets of the printed maps, all the recorded orders in regard to the sites of post-offices and their mode of supply are transferred to the working maps, correction sheets, and sample sheets. This exhibit is also regularly transferred to the numerous sets of diagrams required for reference in the daily business at the headquarters of the Post-Office Department.

3. *Miscellaneous routine work.*—This routine work consists in the issuing of copies of printed post-route maps to the agents of the Post-Office Department, to purchasers, to members of both houses of Congress, etc., and the correspondence connected therewith; the computing and certifying of post-route distances for the settlement of questions of mileage required by public officers, furnishing lists of counties in the United States, and list of distances of the shortest post-routes between the larger and more important places; mounting maps in different forms, correcting and keeping up the published editions to date by the map correctors; preparing color guides, which show the frequency of service, county and State boundaries, for the contractor; entering in duplicate the establishments and changes in post-offices in books classified by States, etc., for the use of the draughtsmen, and the general correspondence of the office.

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REPORT OF THE FIRST ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF THE FIRST ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., November —, 1889.

SIR: I have the honor to submit the following report of the work of this Bureau for the fiscal year ended June 30, 1889:

APPOINTMENT DIVISION.

Statement showing the number of post-offices established and discontinued, the number of postmasters appointed, and the increase or decrease as compared with the previous year:

Post-offices.	June 30, 1888.	June 30, 1889.	Increase.	Decrease.
Number of post-offices established during the year	3,864	2,770	-----	1,094
Number of post-offices discontinued during the year	1,645	1,147	-----	498
Net decrease over previous year	2,219	1,623	-----	596
Whole number of post-offices	57,376	58,999	1,623	-----
Number filled by appointment of the President	2,488	2,684	196	-----
Number filled by appointment of the Postmaster-General.	54,888	56,315	1,427	-----

Appointments during the year.

Appointments.	June 30, 1888.	June 30, 1889.	Increase.	Decrease.
On resignations and commissions expired	6,521	8,854	2,333	-----
On removals	1,244	7,853	6,609	-----
On deaths of postmasters	659	553	-----	106
On establishment of post-offices	3,864	2,770	-----	1,094
Total	12,288	20,030	8,942	1,200

Total number of appointments during the year

Total number of post-offices discontinued

Number of names and sites changed

Total number of cases acted upon during the year

By reference to the above table it will be seen that the number of postmasters appointed during the year ending June 30, 1889, was 20,030, of which 8,854, were upon resignations and commissions expired; 7,853 upon removals; 553 to fill vacancies by death; and 2,770 upon establishment of new post-offices.

There were also 1,147 post-offices discontinued during the year, and the names and sites of 1,021 were changed.

* * * * *

THE FREE-DELIVERY SYSTEM.

NEW FREE-DELIVERY OFFICES.

At the close of the fiscal year there were 401 free-delivery offices, an increase of 43 over the number in operation June 30, 1888.

The new offices established were:

Alton, Ill.	Columbus, Ind.	Fremont, Ohio.
Batavia, N. Y.	Corsicana, Tex.	Fremont, Nebr.
Bayonne, N. J.	Crawfordsville, Ind.	Greenville, S. C.
Beverly, Mass.	Elyria, Ohio.	Goshen, Ind.
Chippewa Falls Wis.	Findlay, Ohio.	Hyde Park, Mass.

Ithaca, N. Y.
 Monmouth, Ill.
 Morristown, N. J.
 Muncie, Ind.
 Nebraska City, Nebr
 New London, Conn.
 Newton, Mass.
 Norwalk, Conn.
 Olean, N. Y.
 Oneida, N. Y.

Paris, Tex.
 Passaic, N. J.
 Pine Bluff, Ark.
 Pittston, Pa.
 Plainfield, N. J.
 Plattsburgh, N. Y.
 Port Jervis, N. Y.
 Red Wing, Minn.
 Roanoke, Va.

Rockland, Me.
 St. Albans, Vt.
 Seneca Falls, N. Y.
 Spokane Falls, Wash.
 Waco, Tex.
 Walla Walla, Wash.
 Warren, Ohio.
 West Troy, N. Y.
 Woburn, Mass.

INCREASE IN CARRIERS' APPROPRIATION, ETC.

The number of carriers had increased from 6,346 to 8,257 during the fiscal year. This large increase was caused by the act of May 24, 1888, limiting the employment of carriers to eight hours per day.

The appropriation for the service was \$7,000,000. The total cost thereof was \$6,957,941.90, leaving an unexpended balance of \$42,058.10.

COMPARATIVE RESULTS FOR 1888 AND 1889.

The following table will show the aggregate results of the operations of the free-delivery system, and a comparison with the preceding year:

Aggregate results of the free-delivery service for the fiscal year ended June 30, 1889.

	1888.	1889.	Increase.	Per cent,
Number of offices.....	358	401	43	12.01
Number of carriers.....	6,346	8,257	1,911	30.11
Registered letters delivered.....	4,271,105	4,523,564	252,459	5.01
Letters delivered.....	873,760,692	1,053,920,529	180,159,837	20.62
Postal-cards delivered.....	212,426,703	253,223,124	40,796,421	19.67
Newspapers, etc., delivered.....	423,710,933	491,595,219	62,884,286	14.67
Letters collected.....	760,113,963	884,664,554	124,550,591	16.38
Postal-cards collected.....	223,980,437	260,267,041	36,286,604	16.20
Newspapers, etc., collected.....	127,597,925	137,611,509	10,013,584	7.85
Whole number of pieces handled.....	2,630,861,758	3,085,805,540	454,943,782	17.25
Pieces handled per carrier.....	415,563	*373,720	41,843	*10.07
Total cost of service, including post-office inspectors.....	\$5,422,356.36	\$6,957,941.90	\$1,535,585.54	†28.32
Average cost per carrier.....	852.06	*\$339.35	12.71	*1.49
Average cost per piece in mills.....	2.0	†2.2	0.2	†10.00
Amount of postage on local matter.....	\$7,721,689.16	\$9,536,921.62	\$1,815,232.66	†23.50
Excess of postage on local matter over total cost of service.....	\$2,299,332.80	\$2,578,979.92	\$279,647.12	†12.16

* Decrease.

† Increase.

* * * * *

EXCESS OF LOCAL POSTAGE OVER COST OF SERVICE.

The receipts from local postage exceeded the cost of service in 36 of the 401 offices (being two less than the preceding year), as shown by the following table:

Post-offices at which the local postage exceeded the cost of the service.

Name of office.	Receipts from local postage.	Cost of carrier service.	Net gain.
Atlanta, Ga.....	\$23,049.68	\$18,567.51	\$4,482.17
Baltimore, Md.....	268,914.19	191,994.06	76,920.13
Birmingham, Ala.....	14,058.92	6,850.13	7,208.79
Boston, Mass.....	770,039.47	381,890.39	388,149.08
Brooklyn, N. Y.....	488,583.58	302,075.35	186,508.23
Buffalo, N. Y.....	128,532.74	91,004.98	37,527.76
Chicago, Ill.....	708,542.33	435,029.85	273,512.48
Cincinnati, Ohio.....	154,386.82	126,892.29	27,494.53
Colorado Springs, Colo.....	4,581.72	2,866.67	1,715.05

Post-office at which the local postage exceeded the cost of the service—Continued.

Name of office.	Receipts from local postage.	Cost of carrier service.	Net gain.
Denver, Colo.	62,541.37	31,311.45	31,229.92
Detroit, Mich.	73,734.62	71,408.19	2,316.43
Hartford, Conn.	28,141.31	22,385.30	5,756.01
Kansas City, Mo.	57,731.36	56,139.42	1,591.94
Leavenworth, Kans.	14,232.44	7,401.53	6,830.91
Lowell, Mass.	20,996.03	20,047.26	948.82
Montgomery, Ala.	5,764.59	5,160.93	603.66
Morristown, N. J.	2,668.47	2,363.14	305.33
Newark, N. J.	71,267.99	56,528.57	14,739.42
New Haven, Conn.	35,476.49	28,715.54	6,760.95
New Orleans, La.	88,970.20	73,168.31	15,801.89
New York, N. Y.	2,272,583.56	920,160.09	1,352,423.47
Omaha, Nebr.	97,545.60	31,930.07	65,615.53
Philadelphia, Pa.	1,426,182.90	595,781.66	830,401.24
Pittsburgh, Pa.	102,063.42	83,346.45	18,716.97
Providence, R. I.	53,161.03	46,421.56	6,739.47
Rochester, N. Y.	61,772.13	54,080.93	7,691.20
St. Louis, Mo.	609,522.16	208,178.82	401,343.34
St. Paul, Minn.	72,490.35	60,845.46	11,644.89
San Francisco, Cal.	195,881.61	140,477.66	55,404.55
Scranton, Pa.	21,398.94	19,068.47	2,330.47
Seattle, Wash.	5,560.77	5,488.12	72.65
Syracuse, N. Y.	29,122.56	28,479.76	642.80
Tacoma, Wash.	4,748.58	4,660.23	88.35
Troy, N. Y.	33,021.92	29,401.64	3,620.28
Wilkes Barre, Pa.	13,359.92	12,270.76	1,089.16
Yonkers, N. Y.	9,429.87	9,110.65	319.22

GROWTH OF THE SYSTEM.

The following table, showing in detail the growth of the free-delivery system of the Post-Office Department from its inauguration, July 1, 1863, is herewith submitted:

Showing the growth of the free-delivery service from its inauguration, July 1, 1863.

Year.	Number of offices.	Number of carriers.	Cost of service.	Postage on local matter.	Excess of cost.	Excess of postage on local matter.
1863-'64	66	685	\$317,063.20			
1864-'65	45	757	448,664.51			
1865-'66	46	863	589,236.41			
1866-'67	47	943	699,934.34			
1867-'68	48	1,198	995,934.59			
1868-'69	48	1,246	1,183,915.31			
1869-'70	51	1,362	1,230,079.85			
1870-'71	52	1,419	1,353,923.23	\$681,864.70	\$548,275.15	
1871-'72	52	1,443	1,385,965.76	768,120.78	595,802.45	
1872-'73	52	1,498	1,422,495.48	907,351.93	478,613.83	
1873-'74	87	2,049	1,802,696.41	1,112,251.21	310,244.27	
1874-'75	87	2,195	1,880,041.09	1,611,481.66	191,214.75	
1875-'76	87	2,269	1,981,186.51	1,947,599.54		\$67,517.55
1876-'77	87	2,265	1,893,619.85	2,085,561.73		\$4,375.22
1877-'78	87	2,275	1,824,160.96	2,254,597.83		\$60,977.98
1878-'79	88	2,359	1,947,706.61	2,432,251.51		\$628,084.55
1879-'80	104	2,688	2,369,693.14	2,812,523.86		\$64,771.14
1880-'81	109	2,861	2,499,911.54	3,068,797.14		705,104.00
1881-'82	112	3,115	2,623,262.74	3,273,630.39		773,718.85
1882-'83	154	3,680	3,173,336.51	3,816,576.09		1,193,313.35
1883-'84	159	3,890	3,504,206.52	4,195,230.52		1,021,894.01
1884-'85	178	4,358	3,985,952.55	4,778,484.87		1,274,278.35
1885-'86	181	4,841	4,312,806.70	5,281,721.10		1,295,768.55
1886-'87	189	5,310	4,618,092.07	5,839,242.97		1,526,936.27
1887-'88	358	6,346	5,422,356.36	6,691,253.69		2,072,561.62
1888-'89	401	8,257	6,957,941.90	7,721,689.16		2,299,332.80
				9,536,921.82		2,578,970.92

* * * * *

REPORT OF THE SECOND ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF SECOND ASSISTANT POSTMASTER-GENERAL,
Washington, November 14, 1889.

SIR: I have the honor to submit the following report of the business of the office of Second Assistant Postmaster-General for the year ended June 30, 1889.

The annual rate of expenditure for inland mail transportation on June 30, 1889, was:

For 15,077 star routes, aggregating 233,331.81 miles in length	\$5,228,387.07½
For 6,344 mail messenger routes, aggregating 5,023.27 miles in length.	949,188.85
For 128 steam-boat routes, aggregating 10,597.87 miles in length	446,032.48
For 2,113 railroad routes, aggregating 150,381.53 miles in length	19,441,095.78
For 156 railway post-office car routes, aggregating 26,659.85 miles in length.....	2,198,517.55
For 5,448 railway post-office clerks	5,268,600.00
For mail equipments	196,630.83½
For necessary and special facilities on trunk lines	295,655.38
Total	34,024,107.94½

Comparison with the report for June 30, 1888, shows:

For the star service, an increase of 931 routes, an increase of 7,724.28 miles in length of routes, and an increase of \$269,195.07 in annual rate of expenditure. The number of miles traveled per annum was 89,777,600.70, at a cost of 5.82 cents per mile; the average number of trips per week was 3.69; an increase of 6,093,601.71 in the number of miles traveled per annum, a decrease of 0.10 cent in the rate of cost per mile, and an increase of 0.13 in the average number of trips per week.

In the regulation wagon service (included in the star service) there were 30 routes, aggregating 400.70 miles in length; the annual rate of expenditure was \$403,729.74; the number of miles traveled per annum, 1,516,344.65; the rate of cost per mile, 26.62 cents; the average number of trips per week, 36.38; an increase of 3.23 miles in length of routes, a decrease of \$1,067 in the annual rate of expenditure; an increase of 2,208.36 in the number of miles traveled per annum; a decrease of 0.11 cent in the rate of cost per mile, and a decrease of 0.24 in the average number of trips per week.

For the mail-messenger service, an increase of 438 routes, an increase of 378.22 miles in the length of routes, and an increase of \$65,470.18 in the annual rate of expenditure.

The number of miles traveled per annum was 10,781,753.91, at a cost of 8.80 cents per mile; the average number of trips per week was 20.63; an increase of 186,398.69 in the number miles traveled per annum; an increase of 0.46 cent in the rate of cost per mile, and a decrease of 1.30 in the average number of trips per week.

In the special office service there were 1,999 routes, aggregating 16,824.66 miles in length, a decrease of 696 in the number of routes, and a decrease of 2,127.90 miles in the length of routes.

The number of miles traveled per annum (estimated on a basis of 1.70 average trips per week) was 2,979,766.36, a decrease (from the estimate for 1888) of 1,290,115.88 in the number of miles traveled per annum.

For the steam-boat service, an increase of one route, a decrease of 460.62 miles in length of routes, and an increase of \$7,090.21 in the annual rate of expenditure.

The number of miles traveled per annum was 3,170,274.26, at a cost of 14.06 cents per mile; the average number of trips per week was 2.87; a decrease of 45,761.72 in the number of miles traveled per annum, an increase of 0.42 cent in the rate of cost per mile, and an increase of 0.08 in the average number of trips per week.

For the railroad service, an increase of 118 routes, an increase of 6,668.21 miles in the length of routes, an increase of \$1,912,495.98 in the annual rate of expenditure for transportation.

The number of miles traveled per annum was 204,192,489.08, at a cost of 9.52 cents per mile for transportation; the average number of trips per week was 13.05; an increase of 18,706,705.75 in the number of miles traveled per annum, an increase of 0.07 cent in the rate of cost per mile for transportation, and an increase of 0.64 in the average number of trips per week.

For the railway post-office car service, an increase of 24 routes, an increase of 2,866.76 miles in length of routes, and an increase of \$202,158.20 in the annual rate of expenditure.

For the railroad service (including the railway post-office car service) the annual rate of expenditure was \$21,639,613.33; the rate of cost per mile traveled was 10.59 cents; an increase of \$2,114,654.18 in the annual rate of expenditure, and an increase of 0.07 cent in the rate of cost per mile.

For railway post-office clerks, an increase of 354 in the number of clerks and an increase of \$184,083 in the annual rate of expenditure.

For mail equipments, a decrease of \$72,899.90 $\frac{5}{16}$ in the annual rate of expenditure.

For necessary and special facilities on trunk lines, a decrease of \$332.15 in the annual rate of expenditure.

The sums actually disbursed appear in the Auditor's report.

The number of contracts drawn in duplicate during the year was 6,693, an increase of 2,239 over the number for the preceding year.

RECAPITULATION.

Summary of all classes of mail service in operation June 30, 1889: Number of routes, 25,661; length of routes, 416,159.14 miles; annual rate of expenditure, \$34,024,107.94 $\frac{7}{16}$; number of miles traveled per annum, 310,901,884.31; rate of cost per mile traveled, 10.94 cents; rate of cost per mile of length, \$81.75; average number of trips per week, 7.18; an increase of 792, or 3.18 per cent., in the number of routes; an increase of 12,182.19 miles, or 3.01 per cent., in the length of routes; an increase of \$2,567,260.58 $\frac{1}{16}$, or 8.16 per cent., in the annual rate of expenditure; an increase of 23,650,828.55 miles, or 8.23 per cent., in the number of miles traveled per annum; a decrease of 0.01 cent or 0.09 per cent., in the rate of cost per mile traveled; an increase of 3.89, or 4.99 per cent., in the rate of cost per mile of length, and an increase of 0.35, or 5.12 per cent., in the average number of trips per week.

* * * * *

E.—Increase and decrease in the star, steam-boat, and railroad service during the year ending June 30, 1889.

SUMMARY BY TOTALS.

States and Territories.	Total length of routes.		Total annual rate of expenditure.		Total miles traveled per annum.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
	Miles.	Miles.	Dollars.	Dollars.	Miles.	Miles.
Maine	10.54		3,009.89		42,750.92	
New Hampshire	32.00		2,202.23		20,539.99	
Vermont		0.43	258.19		19,600.04	
Massachusetts	112.97		68,324.34		718,287.63	
Rhode Island	1.75		204.38		2,356.65	
Connecticut	20.68		7,967.92		23,889.84	
New York	120.73		33,376.76		158,693.60	
New Jersey	24.81		136.30		15,279.36	
Pennsylvania	146.93		8,685.23		132,709.89	
Delaware	4.62		21.14		1,868.88	
Maryland	218.18		13,195.20		163,161.19	
Virginia	561.17		20,377.59		332,527.04	
West Virginia	288.10		4,770.39		98,037.09	
North Carolina	536.93		38,442.38		842,189.24	
South Carolina	397.36		33,828.74		719,419.64	
Georgia	781.98		134,789.62		1,866,929.63	
Florida	288.10		43,513.12		928,467.70	
Alabama	449.89		64,976.55		1,346,750.18	
Mississippi	363.80		50,353.25		1,435,135.54	
Tennessee	296.21		19,768.21		590,894.69	
Kentucky	620.59		69,221.09		1,253,508.31	
Ohio	91.66		446,378.11		4,502,181.56	
Indiana	192.81		150,738.41		1,832,424.54	
Illinois	355.89		136,105.09		1,189,221.36	
Michigan	364.23		123,285.41			136,039.06
Wisconsin	190.62		72,329.53		943,045.91	
Minnesota	645.24		61,841.95		544,672.67	
Iowa	216.88		42,839.64		799,142.24	
Missouri	386.85		48,039.47		399,681.26	
Arkansas	551.03		13,683.38		231,523.06	
Louisiana		48.29	28,533.82		186,447.51	
Texas	958.60		57,174.08		446,193.83	
Indian Territory	181.80		11,639.26		94,538.36	
Kansas		99.01	111,139.18		220,580.09	
Nebraska	431.87		107,228.50		848,101.71	
Dakota	142.09		49,474.16		107,698.08	
Montana	498.06		23,503.86		221,595.25	
Wyoming	784.36		30,051.71		209,588.64	
Colorado	450.68		42,656.32		219,181.50	
New Mexico	216.25		13,367.55		110,508.00	
Arizona	28.09		9,333.57		72,640.98	
Utah		2.38	2,378.18		67,701.22	
Idaho	302.25		12,671.61		56,439.00	
Washington	263.95		26,378.68		177,258.61	
Oregon	544.25		50,946.72		489,381.80	
Nevada	510.65		21,769.85		199,341.60	
California	496.63		80,028.87		608,198.97	
Alaska						
Total	14,081.98	150.11	2,390,939.46		24,890,584.80	136,039.06
Increase	12,931.87		2,390,939.46		24,754,545.74	

REPORT OF THE GENERAL SUPERINTENDENT OF RAILWAY MAIL SERVICE.

POST-OFFICE DEPARTMENT,
OFFICE GENERAL SUPERINTENDENT
RAILWAY MAIL SERVICE,
Washington, D. C., November 1, 1889.

SIR: I have the honor to hand you herewith the annual report of this Service for the fiscal year ended June 30, 1889, consisting of tabular statement showing the amount of work done during the year and the standing of the Service at its close. These statements may be summarized as follows:

EXTENT OF SERVICE.

Up to the close of the year under review service had been authorized by the Department upon 150,381.50 miles of railroad. Postal clerks were employed in the distribution of the mails on 133,110.43 miles. Service on the remainder, namely, 17,271.10 miles having been performed by means of closed pouches, which were, while in transit, in the custody of the railway employes.

EQUIPMENT OF RAILWAY POST-OFFICE AND STEAM-BOAT LINES.

The rolling stock of railway post-office lines on June 30, 1889, consisted of 396 whole cars in use and 94 in reserve, 1,680 apartment cars in use and 485 in reserve, making the total 2,655 cars; the increase over the number reported for the previous fiscal year being 30 whole cars in use and 3 in reserve, 64 apartment cars in use and 69 in reserve, making the total increase 166.

EXTENT OF RAILWAY MAIL SERVICE AND FORCE EMPLOYED.

On the 30th of June, 1889, there were 45 inland steam-boat lines, aggregating 5,543.78 miles, on which postal clerks were employed. There were employed in handling and separating the mails while in transit on railroad routes 4,947 and on steam-boat routes 51 railway postal clerks, making a total of 4,998 men at work on lines. While in the performance of duty these postal clerks traveled (in crews) 124,021,032 miles and those employed on steam-boats 1,849,703 miles, and while en route they distributed 7,026,837,130 pieces of ordinary mail, and receipted for, recorded, protected and distributed 15,866,550 registered packages and cases and 1,134,918 through registered pouches and inner registered sacks.

During the year 6,668.21 miles of new railroad service have been added, being an increase of 4.64 per cent. The lines on which service was performed by clerks show an increase of 6,799 miles, or 5.30 per cent. The mileage of the closed pouch lines decreased from 17,402.59 at the close of the fiscal year 1888, to 17,271.10 miles on June 30, 1889, being a decrease of 131.49 miles, or 0.76 per cent. The annual mileage of this class of service for the fiscal year 1888 was 17,436,819 miles, and for 1889, 18,168,821 miles, an increase of 732,002 miles, or 4.19 per cent., and the number of pouches exchanged daily increased from 13,059 for the year 1888 to 14,340 for 1889, being a daily increase of 1,281, or 9.81 per cent.

Compared with the report for the fiscal year ended June 30, 1888, the number of clerks employed on railroad lines increased from 4,641 to 4,947, and the distances from register to register from 141,369 to 147,971 miles, being an increase of 306 in the number of clerks and 6,602 miles in distance. The number of clerks employed on steam-boat lines decreased from 51 to 51, and the length of routes from 5,972.80 to 5,443.78, being a decrease of 3 in the number of clerks, and 529.02 miles in distance, while the annual miles of service performed increased from 1,767,649 to 1,849,703, being an increase of 82,054, or 4.64 per cent.

On the 30th of June, 1888, there were 5,094 clerks in the service, inclusive of 8 vacancies existing on that date; and on June 30, 1889, there were 5,448 on the roster, being an increase of 354, or 6.95 per cent.

The subjoined exhibit shows the number of clerks engaged on lines, detailed to transfer duty and to office duty, together with the increase over the corresponding date of last year:

Fiscal year ended—	Number employed on railroad lines.	Number employed on steam-boat lines.	Number detailed to transfer duty.	Number detailed to office duty.	Total.
June 30, 1889.....	4,947	51	234	216	5,448
June 30, 1888.....	4,641	54	219	180	5,094
Increase	306	*3	15	36	354

*Decrease.

QUANTITY OF MAIL HANDLED AND ERRORS IN DISTRIBUTION.

During the year ended June 30, 1888, 6,545,876,202 pieces of all classes of mail matter were handled, and 1,765,821 errors of all kinds checked against postal clerks, showing that 99.973 per cent. of all mail handled was correctly distributed, the number of pieces correctly distributed to each error being 3,643. During 1889 the number of pieces handled was 7,043,838,598, and the number of errors checked was 1,808,825, being a correct distribution of 99.974 per cent. of all mail handled, or one error to every 3,895 pieces. The increase in the number of pieces of ordinary mail handled was 7.63 per cent., while the increase in the number of errors checked was but 0.67 per cent.

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TABLE A^a.—Statement of railway post-offices in operation

RECAPITULATION.

Division.	Number of railway post-office lines.	Number of crews.	Number of railway clerks at work on lines.	Whole number of railway postal clerks appointed to railway lines.	Distance in miles run by clerks from register to register.	Miles of railroad route paid for by Department over which clerks run.
First.....	75	188	378	421	7,345.49	5,173.58
Second.....	163	336	571	647	14,130.62	12,153.48
Third.....	59	174	263	306	7,907.92	6,456.73
Fourth.....	90	271	351	388	13,246.75	12,546.80
Fifth.....	141	441	808	868	21,438.55	17,432.12
Sixth.....	161	498	724	783	23,577.71	22,141.34
Seventh.....	108	333	523	568	17,519.09	16,993.53
Eighth.....	37	126	156	165	8,019.15	7,720.63
Ninth.....	51	173	503	549	7,426.91	6,535.88
Tenth.....	93	285	404	425	16,037.32	14,917.98
Eleventh.....	61	200	265	277	11,321.43	11,033.36
Total.....	1,039	2,965	4,947	5,397	147,970.94	133,110.43
Total as per report for fiscal year ended June 30, 1888....	992	2,781	4,641	*5,048	141,368.64	126,310.73
Increase.....	47	184	306	349	6,602.30	6,799.70

* Including eight vacancies existing on June 30, 1888.

Total miles of railroad routes (including distances from depots to post-offices)..... 147,970.91
 Total miles of railroad routes over which railway postal clerks run..... 133,110.43
 Total miles of railroad routes upon which there is no railroad service by clerks..... 17,271.10
 Total annual miles of service by railway postal clerks (by crews)..... 124,021,032
 Total annual miles of railway service of trains carrying express mail and closed pouches. 18,168,821

in the United States June 30, 1889.

RECAPITULATION.

Annual miles of service performed by crews.	Number of cars and apartments.					Total number of letters and pieces of ordinary mail matter handled, exclusive of mail separated for city delivery.	Total number of registered packages and cases handled.	Total number of through registered pouches, including inner registered sacks handled.
	Whole cars in use.	Whole cars in reserve.	Apartments in use.	Apartments in reserve.	Total cars and apartments.			
6,478,890	27	6	115	52	200	481,100,060	1,173,090	85,708
12,505,898	37	22	237	116	412	781,756,350	2,621,478	150,097
6,864,270	37	11	83	15	146	339,414,160	1,014,542	96,134
11,737,089	27	9	146	29	211	517,689,860	1,632,794	94,763
18,514,019	41	8	246	79	374	1,259,480,060	2,029,737	186,768
17,988,545	79	16	211	41	347	956,318,170	1,923,830	103,131
15,327,072	42	18	183	66	309	821,157,120	1,323,093	134,738
6,351,903	19	-----	77	7	103	252,208,750	774,158	40,898
7,145,629	45	-----	74	15	134	688,640,320	901,707	138,837
11,956,887	33	4	163	38	238	552,599,150	1,368,728	51,163
9,151,330	9	-----	145	27	161	376,473,130	1,103,393	52,681
124,021,032	396	94	1,650	485	2,655	7,026,837,130	15,866,550	1,134,918
122,031,104	366	91	1,616	416	2,489	6,528,772,060	16,001,059	1,103,083
1,989,928	30	3	64	69	166	498,065,070	1,134,509	31,835

† Decrease.

Average annual distance run by postal clerks (by crews).....	41,828
Total number of letters, pieces or ordinary mail, registered packages, through registered pouches and inner registered sacks handled.....	7,043,838,598
Total number of errors in distribution (of all kinds).....	1,808,825
Average annual number of errors made by each postal clerk.....	366
Average daily miles run by each postal clerk at work on line.....	139.25

TABLE B^b.—Statement of steam-boat mail service, with postal clerks, in operation in the United States at any time during the year ended on June 30, 1889.

RECAPITULATION.

Division.	Number of lines.	Total number of crews.	Total number of clerks.	Miles of route run by clerks.	Annual miles run by crews.	Number of mail apartments.
First.....						
Second.....	4	3	3	142.50	69,063	7
Third.....	14	14	14	1,637	645,840	12
Fourth.....	15	17	17	2,171.75	510,589	18
Fifth.....	5	7	7	668.03	333,833	9
Sixth.....						
Seventh.....	1	2	2	173	53,976	5
Eighth.....	4	6	6	440	181,234	6
Ninth.....						
Tenth.....						
Eleventh.....	2	2	2	211.50	55,068	2
Total.....	45	51	51	5,443.78	1,849,703	59
Total as per report for the fiscal year ended June 20, 1888.....	41	54	54	5,972.80	1,767,649	65
Decrease.....	*4	3	3	529.02	*82,054	6

* Increase.

Total miles of route.....	5,443.78
Total annual miles of service.....	1,849,703
Average annual distance run by crews.....	36,268
* * * * *	* * * * *

TABLE C^c.—Statement of mail service performed in closed pouches upon railroads and parts of railroads over which no railway post-offices run, in operation during the fiscal year ended June 30, 1889.

RECAPITULATION.

Division.	Number of route.	Miles of route.	Annual miles of service.	Number of pouches exchanged daily.
First.....	112	1,193.11	1,932,558	2,707
Second.....	220	2,665.49	4,076,618	4,424
Third.....	54	721.10	654,221	552
Fourth.....	71	1,279.30	1,137,624	515
Fifth.....	69	836.01	882,888	850
Sixth.....	79	1,466.26	1,237,376	950
Seventh.....	69	1,355.69	1,371,736	847
Eighth.....	74	2,169.90	1,805,004	970
Ninth.....	30	600.71	607,845	475
Tenth.....	98	3,414.33	2,738,333	1,531
Eleventh.....	48	1,569.20	1,674,018	519
Total.....	924	17,271.10	18,168,821	14,340
Total as per report for the fiscal year ended June 30, 1888.....	860	17,402.59	17,436,819	13,059
Increase.....	64	*131.49	732,002	1,281

* Decrease.

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TABLE G^s.—Statement of errors in the distribution and forwarding of mails by post-offices during the fiscal year ended June 30, 1889.

RECAPITULATION.

Division.	Incorrect slips re-turned.	Errors on incor-rect slips.	Missent.						Misdirected.						Errors checked—	
			Letter pack-ages.	Pouches.	Registered packages.	Registered pouches.	Inner regis-tered sacks.	Sacks.	Letter pack-ages.	Pouches.	Registered packages.	Registered pouches.	Inner regis-tered sacks.	Sacks.	Against rail-way postal clerks.	Against postmas-ters.
First.....	21,855	39,563	640	25	26	26	2	3	292	86	.....	.....	.....	54	16,893	18,609
Second.....	108,869	223,316	1,103	333	144	3	5	35	859	131	2	1	.....	159	57,557	48,249
Third.....	17,112	30,237	316	26	22	.....	1	10	200	22	.....	.....	1	32	21,588	8,015
Fourth.....	28,516	57,193	263	35	6	8	4	12	137	24	2	1	1	41	15,574	1,348
Fifth.....	31,532	64,232	485	60	16	.....	4	25	539	64	.....	.....	.....	98	39,510	17,204
Sixth.....	32,651	68,110	653	43	35	.....	.....	18	348	108	3	.....	.....	47	14,236	6,264
Seventh.....	48,394	102,406	827	259	259	18	27	35	285	95	1	1	6	61	65,516	25,143
Eighth.....	14,420	24,635	203	17	47	3	.....	5	123	17	.....	.....	.....	17	19,762	8,534
Ninth.....	6,104	12,897	136	33	32	.....	.....	5	64	9	.....	.....	.....	13	6,598	1,096
Tenth.....	12,935	29,316	250	98	25	2	.....	19	189	51	.....	.....	2	41	3,463	857
Eleventh.....	16,345	34,506	238	99	122	2	9	35	70	32	.....	.....	2	20	9,819	3,194
Total.....	338,733	686,411	5,114	1,028	734	62	52	202	3,106	639	8	3	12	583	270,566	138,513
Total as per report for fiscal year ended June 30, 1888.....	363,356	706,898	5,849	777	740	17	53	247	3,147	646	1	2	7	665	274,057	156,818
Decrease.....	24,623	20,487	735	*251	6	*45	1	45	41	7	*7	*1	*5	82	3,491	18,305

* Increase.

Statement of miles traveled by railway postal clerks in the performance of duty during the fiscal year ended June 30, 1889.

RECAPITULATION.

Division.	Distance from register on R. P. O. lines.	Number of clerks at work on lines.	Annual distance traveled by postal clerks.	Annual average distance traveled by postal clerks.	Average distance run daily (general average being 324 trips per annum).
	<i>Miles.</i>		<i>Miles.</i>	<i>Miles.</i>	<i>Miles.</i>
First.....	10,396.86	378	13,454,117	35,593	109.85
Second.....	14,443.10	574	23,328,333	40,641	125.43
Third.....	9,458.38	281	11,776,800	41,910	129.35
Fourth.....	17,043.20	368	16,732,338	45,468	140.33
Fifth.....	22,106.58	815	38,047,420	46,684	144.09
Sixth.....	27,726.78	724	31,701,816	43,787	135.15
Seventh.....	20,843.53	525	26,031,174	49,583	153.08
Eighth.....	7,747.00	162	7,362,492	45,447	143.35
Ninth.....	10,267.95	503	25,843,763	51,379	158.57
Tenth.....	18,295.12	407	18,515,642	45,493	140.41
Eleventh.....	13,024.01	268	12,018,937	44,847	138.41
Total.....	172,352.51	*5,005	225,812,832	45,117	139.25

* Including 7 additional acting clerks.

RAILWAY MAIL SERVICE CASUALTIES.

* * * * *

Recapitulation of casualties in the Railway Mail Service from 1875 to 1889.

Year ended June 30—	Total number of clerks.	Number of casualties.	Clerks killed.	Clerks seriously injured.	Clerks slightly injured.
1875.....	2,238	(*)	1	(*)	(*)
1876.....	2,415	(*)	1	(*)	(*)
1877.....	2,500	27	2	10	4
1878.....	2,603	36	2	15	3
1879.....	2,609	35	3	14	13
1880.....	2,946	26	—	14	15
1881.....	3,177	62	7	15	22
1882.....	3,570	83	3	16	20
1883.....	3,855	114	1	35	42
1884.....	3,963	154	7	23	60
1885.....	4,387	102	2	35	65
1886.....	4,573	211	—	56	60
1887.....	4,851	244	5	45	72
1888.....	5,094	248	4	63	45
1889.....	5,448	193	10	95	40

* Not reported.

REPORT OF THE THIRD ASSISTANT POSTMASTER-GENERAL.

POST-OFFICE DEPARTMENT,
OFFICE OF THIRD ASSISTANT POSTMASTER-GENERAL,
Washington, D. C., November 23, 1889.

SIR: My first incumbency of this office began on the 1st July, 1877, under appointment by the President bearing date of June 8 of that year; and it continued to the 31st March, 1887, my resignation, offered more than two years previously, having been accepted to take effect on that date. I resumed the duties of the position on the 1st April, 1889, upon nomination by the President on the 18th, and confirmation by the Senate on the 19th of March. My supervision of the business was, therefore, confined to the last quarter of the fiscal year for which this report is made; but from the high personal character of my predecessor, and from the fact that the methods had been commended and left unchanged by him, I submit the results of the year without hesitation.

FINANCIAL OPERATIONS OF THE POSTAL SERVICE.

It has been usual, before presenting the financial statement for the fiscal year on account of which the report is made, to restate the account of the two preceding fiscal years. The reason for this is that a considerable indebtedness remains at the close of the year, the amount of which can only be approximated upon the best available data. This indebtedness is satisfied in by far the greatest part, if not in whole, within the ensuing two years, during which time the appropriations remain available for the purpose before being finally covered into the Treasury. In the new statement, therefore, actual payments take the

place of estimated liabilities shown in previous statements. Following the custom, the accounts for the years 1887 and 1888 are restated as follows :

FISCAL YEAR ENDING JUNE 30, 1887.

REVENUE.

1. Ordinary postal revenue:		
(a) Letter postage paid in money.....	\$93,777.87	
(b) Box-rents.....	2,158,499.98	
(c) Fines and penalties.....	19,433.56	
(d) Postage-stamps, stamped envelopes, news- paper wrappers, and postal cards.....	45,670,983.84	
(e) Dead letters.....	10,976.35	
(f) Miscellaneous.....	164,602.34	
Total ordinary postal revenue.....		\$48,118,273.94
2. Receipts from money-order business.....		719,335.45
		48,837,609.39
Add amount gained by suspense accounts.....		23,566.80
Makes gross revenue.....		48,861,176.19

EXPENDITURES AND LIABILITIES.

Expenditures:

1. Amount expended from July 1, 1886, to Sep- tember 30, 1887.....	\$52,391,677.43
2. Amount expended from October 1, 1887, to September 30, 1888.....	368,160.40
3. Amount expended from October 1, 1888, to September 30, 1889.....	55,712.25

Total amount paid out of appropriations, from July 1, 1886, to September 30, 1889, on ac- count of the service of the year ending June 30, 1887.....	\$52,815,550.08
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Liabilities:

1. Estimated amount of unpaid indebtedness re- maining on September 30, 1889, on account of the service of the year ending June 30, 1887.....	5,529.50
2. Amount chargeable for transportation on the non-aided lines of the Central Pacific Rail- road Company, not certified to the Secretary of the Treasury under decision of the Su- preme Court, and remaining unpaid for want of appropriation.....	289,468.00
3. Amount chargeable for mail transportation on Sioux City and Pacific Railroad, not in- cluded in amount certified to the Secretary of the Treasury, and payment for which is suspended by the Treasury Department....	6,126.09
	301,123.59

Total amount of expenditures and lia- bilities for the service of the year.....	53,116,673.67
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Leaves deficiency in postal revenue.....	4,255,497.48
--	--------------

COST OF POSTAL SERVICE FOR 1887.

The amounts certified to the Secretary of the Treasury for mail transportation on the several Pacific railroads, though by law not payable out of nor chargeable against the appropriations made by Congress for the postal service, should properly be included in ascertaining the cost

of the service. The total cost for the year ending June 30, 1887, will therefore appear as follows:

Amount of expenditures and liabilities shown in the foregoing statement	\$53, 116, 673. 67
Amount certified to the Secretary of the Treasury for credit to the Pacific Railroad Companies for mail transportation:	
From July 1, 1886, to September 30, 1887	\$1, 187, 027. 33
From October 1, 1887, to September 30, 1888	11, 241. 72
From October 1, 1888, to September 30, 1889	250. 78
Total amount certified	1, 198, 519. 83
Gives total cost of service	54, 315, 193. 50
Deduct amount of gross revenue as above	48, 861, 176. 19
Leaves excess of cost of the postal service over amount of postal revenue for year ending June 30, 1887	5, 454, 017. 31

As compared to the previous year, there was an increase of \$33,773.07, or 56.3 per cent., in letter postage paid in money; of \$140,451.94, or 6.9 per cent., in revenue from box-rents; of \$5,961.21, or 44.2 per cent., from fines and penalties; of \$4,223,887.96, or 10.1 per cent., from the sale of postage-stamps, stamped envelopes, newspaper wrappers, and postal cards; of \$2,118.02, or 23.9 per cent., received from Dead-Letter Office; and of \$114,210.66, or 226.6 per cent., in revenue from miscellaneous sources—making a total increase of \$4,520,402.86, or 10.4 per cent., in the amount of ordinary postal revenue collected. There was also an increase of \$368,783.58, or 105.2 per cent., in the receipts from money-order business. The total increase by items was \$4,889,186.44. The gross revenue for 1886 was, however, reduced in the sum of \$12,174.25, and there was a gain of \$23,566.80 by the closing of suspense accounts in 1887. Accordingly, the increase in net revenue for 1887 over that for 1886 was \$4,924,927.49, or 11.2 per cent.

The increase of expenditures and liabilities was \$2,013,830.45, or 3.9 per cent., over those of the previous year. The increase in the total cost of the service (including amount certified to the Secretary of the Treasury) was \$2,099,678.28, or 4 per cent.

The deficiency of revenue required from the Treasury to meet the expenditures was \$4,255,497.48, being equal to 8 per cent. of the total expenditures and liabilities. The total cost of the service (including amounts certified for Pacific railroads) was \$5,454,017.31, or 11.2 per cent., in excess of the gross revenue.

FISCAL YEAR ENDING JUNE 30, 1888.

REVENUE.

1. Ordinary postal revenue:	
(a) Letter postage paid in money	\$61, 903. 40
(b) Box-rents	2, 173, 284. 05
(c) Fines and penalties	19, 583. 76
(d) Postage-stamps, stamped envelopes, newspaper-wrappers, and postal-cards	49, 544, 272. 72
(e) Dead letters	9, 117. 72
(f) Miscellaneous	88, 697. 31
Total ordinary postal revenue	\$51, 896, 858. 96
2. Receipts from money-order business	798, 317. 83
Gross revenue	52, 695, 176. 79

EXPENDITURES AND LIABILITIES.

Expenditures:

1. Amount expended from July 1, 1887, to September 30, 1888.....	\$55,795,357.84
2. Amount expended from October 1, 1888, to September 30, 1889	490,073.70

Liabilities:

1. Estimated amount of unpaid indebtedness for various objects remaining on September 30, 1889, on account of the service of the year ending June 30, 1888	1,146.82
2. Amount chargeable for transportation on the non-aided lines of the Central Pacific Railroad Company, not certified to the Secretary of the Treasury, under decision of the Supreme Court, and remaining unpaid for want of appropriation.....	308,450.55
3. Amount chargeable for mail transportation on Sioux City and Pacific Railroad, not included in amount certified to the Secretary of the Treasury, and payment for which is suspended by the Treasury Department.	10,703.64

Total amount of expenditures and liabilities for the service of the year \$56,605,732.55

Leaves deficiency in postal revenue..... 3,910,555.76

COST OF POSTAL SERVICE FOR 1888.

The estimated total cost of the postal service for the year ending June 30, 1888, including amounts certified to the Secretary of the Treasury for mail transportation on the Pacific railroads, and not chargeable to the appropriations, will appear from the following:

Amount of expenditures and estimated liabilities, as shown in the foregoing statement \$56,605,732.55

Amount certified to the Secretary of the Treasury for credit to the Pacific Railroad Companies for mail transportation:

From July 1, 1887, to September 30, 1888.....	\$1,240,600.83
From October 1, 1888, to September 30, 1889.....	1,507.20

Total amount certified..... 1,242,108.03

Gives total estimated cost of service..... 57,847,840.58

Deduct amount of gross revenue as above..... 52,695,176.79

Leaves excess of estimated cost of the postal service over amount of postal revenue for year ending June 30, 1888..... 5,152,663.79

The items of postal revenue showing an increase, with the amounts thereof, as compared to the receipts from the corresponding sources for the previous year, are as follows: Box-rents, \$14,784.07, or 0.6 per cent.; fines and penalties, \$150.20, or 0.7 per cent.; sales of postage-stamps, stamped envelopes, newspaper wrappers, and postal-cards, \$3,873,288.88, or 8.4 per cent. The items showing a decrease are as follows: Letter postage paid in money, \$31,874.47, or 33.9 per cent.; received from Dead-Letter Office, \$1,858.63, or 16.9 per cent.; miscellaneous, \$75,905.03, or 46.1 per cent. The three items of increase amounted to \$3,888,223.15, and the three items of decrease to \$109,638.13, leaving the net amount of increase by items, \$3,778,585.02. In addition to the foregoing, there was an increase of \$78,982.38, or 10.9 per cent., in the receipts from money-order business. The gross revenue for 1887 included \$23,566.80 gained on suspense account, and the increase in the gross amount for 1888 over that for 1887 was, therefore, \$3,834,000.60, or 7.8 per cent.

The increase of expenditures and estimated liabilities was \$2,489,058.88, or 6.5 per cent., over those of the preceding year. The increase in the estimated total cost of the service (including certifications to the Secretary of the Treasury for transportation on the Pacific railroads) was \$3,532,647.08, or 6.5 per cent., over that of the previous year.

The estimated deficiency of revenue needed from the Treasury to meet the expenditures and liabilities was \$3,910,555.76, being equivalent to 6.9 per cent. of the total expenditures and estimated liabilities. The total estimated cost of the service (including amount certified on account of Pacific railroads) was \$5,152,663.79, or 9.8 per cent., in excess of the gross revenue.

FISCAL YEAR ENDING JUNE 30, 1889.

REVENUE.

1. Ordinary postal revenue:	
(a) Letter postage paid in money.....	\$176,612.28
(b) Box-rents	2,188,578.98
(c) Fines and penalties.....	19,900.20
(d) Postage-stamps, stamped envelopes, newspaper-wrappers, and postal-cards.....	52,953,101.83
(e) Dead letters	12,722.38
(f) Miscellaneous	36,890.70
Total ordinary postal revenue.....	\$55,337,806.37
2. Receipts from money-order business.....	787,804.81
Gross revenue.....	56,175,611.18
Less amount charged to bad debts, compromise and suspense cases	27,596.26
Leaves as total revenue	56,148,014.92

EXPENDITURES AND LIABILITIES.

Expenditures:

Amount expended from July 1, 1888, to September
30, 1889

\$61,376,847.24

Liabilities:

1. Estimated amount of unpaid indebtedness for various objects remaining on September 30, 1889, on account of the service of the year	\$587,968.62
2. Estimated amount of indebtedness not yet reported to Auditor by the Department on account of the transportation of the mails by railroad.....	200,000.00
3. Amount chargeable for transportation on the non-aided lines of the Central Pacific Railroad Company, not certified to the Secretary of the Treasury under decision of the Supreme Court, and remaining unpaid for want of appropriation	321,077.25
4. Amount chargeable for mail transportation on Sioux City and Pacific Railroad, not included in amount certified to the Secretary of the Treasury, and payment for which is suspended by the Treasury Department.....	12,305.24
	1,121,351.11

Total amount of expenditures and liabilities for
the service of the year

62,498,198.35

Leaves deficiency in postal revenue

6,350,183.43

COST OF POSTAL SERVICE FOR 1889.

The estimated total cost of the service for the year ending June 30, 1889, including amount certified to the Secretary of the Treasury for transportation of the mails on the Pacific railroads and not chargeable to the appropriations, will appear as follows :

Amount of expenditures and estimated liabilities, as shown in the foregoing statement	\$62,498,198.35
Amount certified to the Secretary of the Treasury for credit to the Pacific Railroad Companies for mail transportation.....	1,253,673.33
Gives total estimated cost of service	63,751,871.68
Deduct amount of net revenue, as above	56,148,014.92
Leaves excess of cost of the postal service over amount of postal revenue for year ending June 30, 1889.....	7,603,856.76

As compared to the year ending June 30, 1888, there was an increase of \$114,708.88, or 185.3 per cent., in letter postage paid in money; of \$15,294.93, or 0.7 per cent., in box-rents; of \$316.44, or 1.6 per cent., in the amount received from fines and penalties; of \$3,408,829.11, or 6.8 per cent., in the amount received from the sale of postage-stamps, stamped envelopes, newspaper wrappers, and postal-cards; and of \$3,601.66, or 39.5 per cent., from dead letters—making a total of \$3,542,754.02. There was a decrease of \$51,306.61, or 58.4 per cent., in miscellaneous receipts, leaving the net increase of postal revenue by items at \$3,490,947.41, or 6.7 per cent., over the postal revenue for 1888. The receipts for money-order business showed a decrease of \$10,513.02, or 1.3 per cent., as compared to the previous year.

The gross revenue of the year (\$56,175,611.18) was reduced in the sum of \$27,596.26 through the adjustment of bad debts, compromise and suspense accounts, leaving a balance of net revenue of \$56,148,014.92. This was an increase of \$3,452,838.13, or 6.6 per cent., over the revenue for the year ending June 30, 1888. The increase of expenditures and estimated liabilities was \$5,892,465.80, or 10.4 per cent., over those of the previous year. The increase in the estimated total cost of the service, including amount certified to the Secretary of the Treasury for transportation of the mails on the Pacific railroads, was \$5,904,031.10, or 10.2 per cent., over that of the year ending June 30, 1888. The estimated deficiency of revenue needed from the Treasury to meet the expenditures and liabilities was \$6,350,183.43, being equal to 11.3 per cent. of the total expenditures and estimated liabilities for the year. The total cost of the service, including amount certified on account of the Pacific railroads, was \$7,603,856.76, or 13.5 per cent., in excess of the gross revenue.

The appropriations for the service of the year amounted to \$62,093,392.79, including \$121,937.05 for the special-delivery system, for which no specific amount is appropriated, the expenses of the system being payable out of its receipts. The appropriations covered thirty-nine items, including that for special-delivery service. The total amount expended up to the 30th September on account of the year ending June 30, 1889, was \$61,376,847.24. In thirty-eight items of appropriation there were unexpended balances remaining on the 30th September to the amount of \$1,085,536.54. In one item, that of compensation to postmasters, the expenditure exceeded the appropriation in the sum of \$368,999.99. The net amount of unexpended balances was, therefore, \$716,545.55, which is left available for the discharge of the indebtedness on account of the respective items for which appropriation was made.

By quarters the expenditures of the fiscal year ending June 30, 1889, as compared to those for the corresponding periods of the previous fiscal year, were as follows: For the service of the quarter ending September 30, 1888, \$14,710,215.83, being an increase of \$1,066,377.07, or 7.8 per cent.; for service of the quarter ending December 31, 1888, \$15,233,024.10, being an increase of \$1,441,243.49, or 10.4 per cent.; for the service of the quarter ending March 31, 1889, \$15,719,984.02, being an increase of \$1,643,358.79, or 11.6 per cent.; and for the service of the quarter ending June 30, 1889, \$15,713,623.29, being an increase of \$1,430,510.05, or 10 per cent.

Among the principal items of expenditure for the year, there was an increase over the expenditure of the year ending June 30, 1888, of \$579,222.33, or 4.6 per cent., for compensation to postmasters; of \$413,782.62, or 7.5 per cent., for compensation to clerks in post-offices; of \$312,870.25, or 62.1 per cent., for rent, fuel, and light in post-offices; of \$1,535,520.42, or 28.3 per cent., for free-delivery service; of \$162,017.21, or 3.2 per cent., for transportation on star routes; of \$2,052,516.19, or 12.9 per cent., for inland transportation by railroad; of \$18,014.42, or 4.3 per cent., for steamboat transportation; of \$168,102.24, or 9.2 per cent., for railway postal-car service; of \$75,037.70, or 8.8 per cent., for mail-messenger service; and of \$266,764.92, or 5.3 per cent., for railway post-office clerks.

ESTIMATES FOR THE FISCAL YEARS ENDING JUNE 30, 1890 AND 1891.

From the foregoing exhibits it will appear that the rate of increase of ordinary postal revenue collected for the year ending June 30, 1887, over that of 1886, was 10.4 per cent.; the increase for the year ending June 30, 1888, over the revenue of 1887, was at the rate of 7.8 per cent.; and for the year ending June 30, 1889, there was an increase of 6.7 per cent. over the postal revenue of 1888. In the annual report of 1888 allowance was made for an annual increase of 9 per cent., but the actual revenue to be realized for the year will fall considerably short of the amount at which it was then estimated. In the estimate of revenue for the present and ensuing fiscal years an increase of 8 per cent. will be assumed, and this estimate is justified by recent returns showing an improved condition in the growth of the postal receipts. The estimated revenue for the year may therefore be stated as follows:

FISCAL YEAR ENDING JUNE 30, 1890.

Amount of ordinary postal revenue for year ending June 30, 1889	\$55,387,806.37
Increase by 8 per cent.	4,431,024.50
Estimated amount of ordinary postal revenue	59,818,830.87
Add revenue from money-order business, as estimated by the Superintendent of the money-order system	800,000.00
Gives gross revenue	60,618,830.87

The total amount appropriated for the expenditures of the year is \$66,605,344.28. The First Assistant Postmaster-General, however, now estimates that there will be a deficiency of \$179,117 in the appropriation for pay of postmasters; the Second Assistant Postmaster-General estimates that the appropriation for railway mail transportation will be insufficient in the sum of \$923,430.24; and that the appropriation for steamboat service will fall short in the sum of \$20,000. The total amount of the appropriations already made, and of the additional ap-

propriations to be required, is therefore \$67,727,891.52. Allowing for the expenditure of the entire amount, would make the deficiency to be supplied from the General Treasury, \$7,109,060.65.

FISCAL YEAR ENDING JUNE 30, 1891.

Estimated amount of ordinary postal revenue for year ending June 30, 1890, as before	\$59,818,830.87
Add increase of 8 per cent.....	4,785,506.47
.....
Gives estimated amount of ordinary postal revenue for the year.	64,604,337.34
Amount of estimated revenue from money-order business	810,000.00
.....
Gross revenue for the year.....	65,414,337.34
Amount of estimated expenditures shown in table of estimates submitted by the Postmaster General through the Secretary of the Treasury	72,434,698.99
.....
Leaves estimated deficiency of revenue to be supplied out of general Treasury.....	7,020,361.65

AMOUNTS DRAWN FROM THE TREASURY.

The following amounts were drawn from the General Treasury, within the last fiscal year, on account of special and deficiency appropriations, viz:

For deficiency in the postal revenue for the years 1885 and 1886 (claims) under the act approved October 19, 1888	\$81,666.98
For deficiency in the postal revenue for 1886, under act approved March 3, 1885	225,621.23
For deficiency in the postal revenue for 1886, under act approved March 2, 1889.....	28,063.51
For deficiency in the postal revenue for 1888, under act approved March 3, 1887.....	535,287.40
For deficiency in the postal revenue for 1889, under act approved July 24, 1888.....	3,000,000.00
.....
Total drawn during the year.....	3,870,639.12

NOTE.—The discrepancy in amount reported by the Auditor as drawn from the Treasury and the amount reported by this office (\$1,873,378.77) is caused by the different periods in which they were reported drawn, the Auditor reporting amounts from October 1, 1888, to September 30, 1889, while the period in which this office reported amounts drawn was from July 1, 1888, to June 30, 1889.

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REPORT OF THE SUPERINTENDENT OF THE POSTAL MONEY-ORDER SYSTEM.

POST-OFFICE DEPARTMENT,
OFFICE OF SUPERINTENDENT OF MONEY-ORDER SYSTEM,
Washington, D. C., November 16, 1889.

SIR: I have the honor to submit the following report of the operations of the Postal Money-Order System of the United States for the fiscal year ended June 30, 1889.

This system may now be ranked among the permanent institutions characteristic of the times, the issue and payment of postal money-orders in the United States having been commenced on the 1st of November, 1864, a full quarter of a century ago. Table A, in the Appendix, exhibits the growth of the domestic money-order business during this period, showing the number of post-offices authorized to

transact such business, the number and amount of orders issued and paid, the amount of fees received, and the expenses year by year.

NUMBER OF MONEY-ORDER OFFICES.

To the 8,241 money-order offices in operation June 30, 1888, there were added during the past fiscal year 512, and 26 such offices were discontinued. On June 30, 1889, the total number of money-order offices in operation was 8,727. Since the latter date a further increase of 306 offices has been made, while 5 have been discontinued, leaving at this date 9,028 offices authorized to issue and to pay money-orders.

NUMBER OF POSTAL-NOTE OFFICES.

By the act of Congress approved January 3, 1887, the Postmaster-General was empowered to authorize the issue (but not payment) of postal notes at post-offices which are not money-order offices. Such notes, which may be drawn for any sum less than \$5, and are issued for a fee of 3 cents each, are payable at any money-order office, and present a cheap and convenient means of making small remittances through the mails from certain designated post-offices which are not of sufficient importance to be made money-order offices.

In contradistinction to money-order offices, all of which both issue and pay postal notes, the offices authorized, under the act mentioned, to issue such notes only are styled postal-note offices. At the close of the fiscal year ended June 30, 1888, there were in operation 311 such offices, and during the past year 276 were established, while 30 were discontinued as such, making the number in operation on the 30th of June last 557. At present there are 642, 106 having been established and 21 discontinued since the date last named. Of the whole number (51) mentioned as discontinued 34 became money-order offices, thereby gaining additional facilities.

ISSUES AND PAYMENTS OF DOMESTIC MONEY-ORDERS.

The number of domestic money-orders issued during the year was 10,130,140, aggregating in amount..	\$115,081,845.79
The number of such orders paid during the same period was 10,051,909 of the value of.....	\$114,447,868.90
And the number repaid 76,634, amounting to.....	834,038.04
Making the total amount of payments and repayments.....	115,281,906.94
The excess in amount of payments and repayments over issues for the year being.....	200,061.15
The gross amount of the fees received by postmasters from the public for the issue of domestic money-orders was.....	933,607.50

A comparison of the above with the statement for the previous year shows:

(1) An increase of 170,933, or 1.72 per cent., in the number of orders issued, and of 183,500, or 1.85 per cent., in the number of orders paid and repaid.

(2) A decrease of \$4,567,219.19, or 3.82 per cent., in the amount of orders issued, and of \$4,461,438.31, or 3.73 per cent., in the amount of orders paid and repaid.

(3) A decrease of \$13,353.62, or 1.41 per cent., in the gross amount of fees received.

The average amount of the orders issued was \$11.36, or 65 cents less than the average amount of orders issued in the previous year.

The average fee received was 9.22 cents, being .29 of a cent less than the average fee in 1887-'88. An explanation is here found of the fact that an increase in the number of orders issued was not attended by a corresponding increase in the aggregate amount of such orders or in the gross amount of fees received, the proportion in number of small orders to the whole number of orders issued being greater than during the previous year.

In table marked E, in the Appendix, will be found an interesting exhibit of the number and ratio per thousand of each of twenty different grades of domestic money-orders paid during the month of March, 1889, at 594 first and second class post-offices and 133 stations or branch offices.

ISSUES AND PAYMENTS OF POSTAL NOTES.

The number of postal notes issued during the year was 6,802,720, aggregating in amount.....	\$12, 082, 190. 73
And the number of postal notes paid during the same time was 6,707,106, of the value of.....	\$11, 925, 658. 26
While the notes repaid at the offices of issue numbered 80,348, amounting to.....	152, 419. 44
Making the total amount of payments and repayments.....	12, 078, 077. 70
The excess in the amount of issues over payments and repayments being	4, 113. 03
The gross amount of fees received from the public (including fees collected for duplicates of invalid postal notes) was.....	204, 377. 82
* * * * *	* * * * *

LOST REMITTANCES.

Ninety-nine cases of alleged loss, in transit by mail or otherwise, of money-order funds were brought to the notice of this office during the last fiscal year. Two of these were cases of remittances of surplus money-order funds alleged to have been made during the preceding year. All of these cases, involving in the aggregate the sum of \$5,722.88, were referred to the Assistant Attorney-General for this Department for adjudication under the provisions of the act of March 17, 1882, by which the Postmaster-General is empowered to allow credit for losses of this nature incurred through no fault or negligence on the part of the postmaster. An enumeration in detail of these ninety-nine cases will be found in Table C, of the Appendix.

ERRONEOUS PAYMENT OF MONEY-ORDERS.

Fifty-six money-orders issued during the last fiscal year, amounting in the aggregate to \$1,214.06, were reported to the Department as having been improperly paid, the number being in the ratio of 1 to every 184,171 orders paid (international orders included). These 56 orders are described in Table D, of the Appendix. In the same table will be found the particulars of 97 other orders alleged to have been erroneously paid. They comprise 50 orders, amounting to \$1,395.36, in cases which were undergoing investigation at the close of the previous fiscal year, and 47 orders, amounting to \$1,237.84, in regard to which, although they were issued prior to July 1, 1888, no complaint was made to the Department until after the commencement of the last fiscal year.

Post-office inspectors recovered the amounts of 19 orders, and paid the money, in all \$693.11, to the true payees. In 22 cases, in which

the orders aggregated \$296.42, it was ascertained that the claims were not well founded, the orders having been properly paid in the first instance.

For failure to exercise the precaution enjoined by the regulations, postmasters were required to make good to the owners the amounts of 32 orders, in all \$607.06. The payees themselves being at fault, were made to sustain the loss of the amounts of three orders, aggregating \$162; while in three other cases, involving the sum of \$63.96, the evidence not being sufficient to fix the responsibility either upon the postmaster, the remitter, or the payee, the Department assumed the loss. Investigation of the remaining 74 cases, involving in all \$2,024.71, was in progress at the close of the year.

REVENUES AND EXPENSES.

As reported by the Auditor of the Treasury for the Post-Office Department, the revenues and expenses of the domestic money-order business for the last fiscal year were as follows:

RECEIPTS.

Amount received for fees on orders issued.....	\$933,607.50
Amount of gain.....	157.00
Amount of premiums, etc	56.85
Total.....	933,821.35
* * * * *	* * * * *

THE INTERNATIONAL MONEY-ORDER SYSTEM.

An act passed at the last session of Congress, approved January 30, 1889, authorized the increase of the maximum amount of a single international money-order from \$50 to \$100. In pursuance of the provisions of the act mentioned, agreements increasing the amount for which a single order may be drawn to \$100, or to an amount in the foreign currency as near the equivalent thereof as will be most convenient in practice, have been made with the following countries, viz: France, Belgium, Switzerland, Italy, Portugal, the Netherlands, Germany, Sweden, Norway, Denmark, Newfoundland, the Hawaiian Islands, Japan, New Zealand, Queensland, Victoria, Tasmania, the Windward Islands, and the Leeward Islands.

The postal administrations of Great Britain, Jamaica, and Cape Colony declined to enter into any agreement increasing the maximum amount. Of the final action of the authorities of New South Wales upon the question of making this change, this Department is not yet advised.

During the past year, at the request of the postal administration of Newfoundland, were arranged the terms of a convention providing for the direct exchange of money-orders between the United States and that country; and such convention having been duly concluded, went into effect on the 1st day of July, 1889. Prior to that date, money-order business between Newfoundland and the United States had been conducted through Canada, as intermediary, and under that arrangement the postal administration of Newfoundland was obliged to pay to the Canadian postal administration a charge of 1 per cent. on the total amount of money-orders issued in Newfoundland on the United States and passing through Canada, while Canada paid to the United States one-half of 1 per cent. of the amount of such orders. Upon money-orders originating in the United States and payable in Newfoundland the latter received no commissions, the United States paying to Canada

one-half of 1 per cent. of the amount of orders so issued. In the direct exchange of money-orders now in operation Newfoundland pays on the total amount of orders which it issues on the United States one-half of 1 per cent. to the latter country, which, *vice versa*, pays to Newfoundland one-half of 1 per cent. of the total amount of orders which it issues payable in that island.

On June 30, 1888, the money-order offices in the United States authorized to transact international money-order business numbered 1,701. During the year ended on the 30th of June last, 77 were added to this number, while from 2 offices the international system was withdrawn, leaving the total number of offices transacting such business on the latter date 1,776. International money-order facilities have since been extended to 93 additional offices; and the total number of offices in this country at present authorized to issue and pay international money-orders is, therefore, 1,869.

* * * * *

GENERAL FINANCIAL RESULTS.

The domestic and international money-orders and the postal-notes issued during the last fiscal year numbered in all 17,757,287, and amounted to \$139,444,553.19, while the payments and repayments numbered 17,180,197, and amounted to \$131,884,232.91. The aggregate amount of the fees received from the public was \$1,289,830.92. Compared with the total volume of business transacted the previous year these figures show :

(1) An increase of 370,438, or 2.13 per cent., in the total number of issues, and of 363,425, or 2.16 per cent., in the total number of payments and repayments.

(2) A decrease of \$3,632,840.88, or 2.54 per cent., in the aggregate amount of the issues, and of \$1,171,429.51, or 3.07 per cent., in the aggregate amount of the payments and repayments.

(3) An increase of \$3,017.02, or 0.23 per cent., in the gross amount of fees received.

* * * * *

I venture also to recommend the adoption of measures in accordance with the suggestion made in my annual report for the year ended June 30, 1886, as follows :

I am convinced by experience and observation that the facilities afforded by the money-order system are not as well known as they should be in the smaller towns. The Department heretofore has made no effort to bring this system to the notice of the public further than to place in every money-order post-office a placard containing a brief announcement of the fact that money-orders might be obtained thereat. I believe that in the interest of that class of people in the smaller towns and cities who have occasion to make remittances by mail, and with the object of preventing, as far as possible, the transmission of money in letters, it would be both expedient and profitable to advertise the system in such localities by means of circulars distributed through the agency of the postmasters, whose services for this purpose could be readily enlisted, because the anticipated increase of business occasioned by the distribution of the advertisements would increase their commissions for the clerical work of issuing and paying the orders. The expense of printing a sufficient supply of circulars would not, in my opinion, exceed \$2,500, and such expense could be defrayed from the proceeds of the money-order business.

I am, sir, very respectfully, your obedient servant,

C. F. MACDONALD,
Superintendent of the Money-Order System,

Hon. JOHN WANAMAKER,
Postmaster-General,

REPORT OF THE SUPERINTENDENT OF FOREIGN MAILS.

POST-OFFICE DEPARTMENT,
OFFICE OF FOREIGN MAILS,
Washington, D. C., October 26, 1889.

SIR: I have the honor to submit the following report of the principal operations in connection with the foreign mail service for the fiscal year ended June 30, 1889.

From Table (A) immediately following, showing the weights of the mails dispatched by sea to foreign countries, and the percentage dispatched to each of the countries named therein, it will be seen that the aggregate weights of said mails were:

	Grams.	Pounds.
Letters and post cards	309,810,196 =	683,131
Other articles	1,554,975,505 =	3,428,721
Total		4,111,852

Of which, the mails for transatlantic destinations comprised:

	Grams.	Pounds.	Per cent.
Letters and post cards	278,288,824 =	613,627	(89.82)
Other articles	1,150,992,404 =	2,537,938	(74.02)
Total		3,151,565	

And that of the transatlantic mails, the mails for Great Britain consisted of:

	Grams.	Pounds.	Per cent.
Letters and post cards	118,682,419 =	261,695	(42.65)
Other articles	584,119,984 =	1,287,985	(50.75)
Total		1,549,680	

The mails for Germany:

	Grams.	Pounds.	Per cent.
Letters and post cards	58,006,952 =	127,905	(20.84)
Other articles	234,361,869 =	516,768	(20.36)
Total		644,673	

The mails for France:

	Grams.	Pounds.	Per cent.
Letters and post cards	18,422,561 =	40,622	(6.62)
Other articles	90,179,866 =	198,847	(7.84)
Total		239,469	

with each of which countries there is direct steam-ship communication, leaving as the weights of the mails for all other transatlantic destinations—

	Grams.	Pounds.	Per cent.
Letters and post cards	83,176,892 =	183,405	(29.89)
Other articles	242,330,685 =	534,339	(21.05)
Total		717,744	

A.—Statement showing the net weights and percentage of the mails dispatched by sea to foreign countries during the fiscal year ended June 30, 1889.

TRANSATLANTIC SERVICE.

Countries.	Letters and post cards.	Per cent.	Other articles.	Per cent.
	<i>Grams.</i>		<i>Grams.</i>	
Great Britain	118,682,410	42.65	584,119,984	50.75
Austria	11,105,350	3.99	26,049,405	2.26
Belgium	3,029,871	1.09	17,880,120	1.55
Denmark	4,477,575	1.61	9,772,195	.85
France	18,422,561	6.62	90,179,866	7.84
Germany	58,006,952	20.84	234,361,869	20.36
Italy	13,986,870	5.03	47,058,330	4.09
Netherlands	3,337,725	1.20	12,429,940	1.13
Norway	9,481,530	3.41	17,573,435	1.53
Portugal	975,385	.35	2,959,685	.26
Russia	9,345,525	3.36	11,653,860	1.01
Spain	2,318,900	.83	14,829,345	1.29
Sweden	19,304,416	6.94	49,863,060	4.33
Switzerland	5,080,470	1.82	25,690,755	2.23
Turkey	733,020	.26	6,558,785	.57
Africa (west coast direct)	255	.....	6,770	.....
Totals	*278,288,824	.....	†1,150,992,404	.....

*Or 613,627 pounds.

†Or 2,537,938 pounds.

TRANS-PACIFIC AND MISCELLANEOUS SERVICE.

Japan	2,925,591	9.28	31,730,291	7.85
Hong-Kong	1,734,014	5.50	5,356,882	1.33
United States consul, Shanghai	649,934	2.06	10,850,183	2.69
Cochin China	5,711	.02	56,868	.01
Java	9,049	.03	44,715	.01
Manila	73,793	.23	1,069,444	.26
Singapore	19,239	.06	404,832	.10
Siam	5,780	.02	131,727	.03
Australian Colonies	3,126,151	9.92	92,915,642	23.00
Hawaii	1,917,721	6.08	22,317,619	5.52
Samoa	174,853	.55	2,061,116	.51
Tabiti	70,811	.22	1,222,391	.30
New Caledonia	14,405	.05	181,924	.05
Marquesas and Marshall Islands	5,784	.02	170,144	.04
Cuba	3,572,984	11.34	34,417,023	8.52
Porto Rico and St. Thomas via Cuba	168,675	.54	2,054,450	.66
Porto Rico and St. Thomas direct	190,530	.64	1,384,390	.34
Bahamas	279,020	.89	3,193,981	.79
Bermuda	772,585	2.45	7,678,750	1.90
Jamaica	706,970	2.24	7,552,340	1.88
Hayti	456,525	1.45	4,526,629	1.12
San Domingo	183,050	.58	3,405,190	.84
St. Thomas	482	.....	623	.....
Turks Islands	39,845	.13	291,230	.07
Windward Islands	1,040,800	4.25	12,882,440	3.19
Brazil	1,214,604	3.85	17,635,562	4.37
Uruguay	183,110	.58	4,133,725	1.02
Argentine Republic	734,292	2.33	15,426,607	3.82
Paraguay	12,760	.04	417,100	.10
Mexico	1,270,063	4.03	12,985,765	3.21
British Honduras	232,090	.74	1,702,860	.42
Costa Rica	518,572	1.65	6,195,302	1.53
Guatemala	727,594	2.31	9,175,129	2.27
Nicaragua	519,876	1.65	6,109,516	1.51
Republic of Honduras	421,215	1.34	5,228,043	1.29
Salvador	331,729	1.05	5,291,305	1.31
Venezuela	1,016,070	3.22	13,256,765	3.28
Curaçoa	312,889	.99	1,681,785	.42
Republic of Colombia	1,512,475	4.80	20,546,964	5.09
Bolivia	59,410	.16	1,594,800	.39
Ecuador	339,738	1.08	4,034,281	1.00
Peru	595,254	1.80	11,260,263	2.79
Chili	705,741	2.24	15,569,985	3.85
British Columbia	1,145,252	3.63	4,233,838	1.05
Nova Scotia	932,594	2.96	.....	.....
Newfoundland	55,140	.18	499,245	.12
St. Pierre and Miquelon	5,955	.02	33,215	.01
Totals	*31,521,372	.....	†403,983,101	.....
Aggregate	‡309,810,196	.....	§1,554,975,505	.....

*Or 69,504 pounds.

†Or 890,713 pounds.

‡Or 683,131 pounds.

§Or 3,428,721 pounds.

A comparison of the foregoing Table with the similar Table furnished with the report for last year, shows the weights of the mails to have increased as follows, viz:

	1889.		1888.		Increase.		
	<i>Grams.</i>	<i>Pounds.</i>	<i>Grams.</i>	<i>Pounds.</i>	<i>Grams.</i>	<i>Pounds.</i>	<i>Per cent.</i>
Transatlantic:							
Letters and post-cards.....	278, 288, 824	613, 627	263, 550, 944	581, 130	14, 737, 880	32, 497	5. 59
Other articles....	1, 150, 992, 404	2, 537, 938	1, 024, 887, 367	2, 259, 877	126, 105, 037	278, 061	12. 30
Other destinations:							
Letters and post-cards.....	31, 521, 372	69, 504	28, 337, 078	62, 483	3, 184, 294	7, 021	11. 24
Other articles....	403, 983, 101	890, 783	346, 083, 996	763, 115	57, 899, 105	127, 668	16. 73
Aggregate:							
Letters and post-cards.....	309, 810, 196	683, 131	291, 888, 022	643, 616	17, 922, 174	39, 518	6. 14
Other articles....	1, 554, 975, 505	3, 428, 721	1, 370, 971, 363	3, 022, 992	184, 004, 142	405, 729	13. 42

The following Table (B) shows the weights of the mails conveyed and the amount of compensation received by each of the different lines of steamers, as well as which are of United States, and which of foreign register; and Table (C) shows the weights of the foreign closed mails forwarded from the United States by the different lines of steamers, and the compensation paid to each line for their conveyance.

* * * * *

REPORT OF THE SUPERINTENDENT OF THE DEAD-LETTER OFFICE.

POST-OFFICE DEPARTMENT,
DEAD-LETTER OFFICE,
Washington, D. C., October 1, 1889.

SIR: I have the honor to submit herewith the following report and accompanying statements illustrating the operations of the Dead-Letter Office for the fiscal year ended June 30, 1889:

There were received during the year 6,206,893 pieces of original dead mail matter, a decrease of 10,983 pieces from the number received during the fiscal year ended June 30, 1888. In addition to this number, there were also received 261,956 letters without valuable inclosures, which had been returned to the writers, but, failing of delivery, were again sent to the Dead-Letter Office. These, together with 230 "held-for-postage" letters, and 10,214 letters of foreign origin on hand and undisposed of on July 1, 1888, make the total number of pieces treated during the year 6,479,293, which were classified, treated, and disposed of as follows:

1. Domestic mailable letters:

(a) Ordinary unclaimed letters.....	4, 650, 986
(b) Letters returned from hotels.....	137, 120
(c) Letters bearing fictitious addresses.....	23, 701
(d) Letters returned from foreign countries.....	180, 481
(e) Ordinary letters without inclosures sent to writers and returned on failure to deliver.....	261, 956
	5, 254, 244

2. Domestic unmailable letters:

(a) Letters containing unmailable articles.....	1, 308
(b) Letters held for postage.....	109, 863

2. Domestic unmailable letters—Continued

(c) Letters misdirected or only partially addressed.....	455, 421	
(d) Letters without address.....	19, 684	
(e) Miscellaneous	5, 567	
		591, 843
3. Domestic parcels of third and fourth class matter.....		76, 088
4. Letters mailed in foreign countries.....		495, 820
5. Printed matter, samples, etc., mailed in foreign countries and return- able		38, 982
6. Registered articles:		
(a) Of domestic origin	5, 069	
(b) Of foreign origin.....	17, 247	
		22, 316
Total as before.....		6, 479, 293

The mail matter treated during the year was disposed of as follows:

Domestic mailable letters:

Card and request letters delivered unopened.....	68, 034
Letters opened (disposed of as detailed below).....	4, 926, 084
Ordinary letters without valuable inclosures sent to writers and re- turned on account of failure to deliver, and subsequently destroyed..	261, 956

Domestic unmailable letters:

Held-for-postage letters forwarded unopened to addresses on receipt of postage.....	3, 783
Held-for-postage letters forwarded to officials unopened.....	256
Held-for-postage letters opened (disposed of as below).....	104, 858
Held-for-postage letters on hand at close of year	193
Misdirected letters forwarded unopened after correction of address....	96, 105
Misdirected letters opened (disposed of as below)	358, 259
Letters without address opened (disposed of as below).....	19, 684
Letters containing unmailable articles opened (disposed of as below)..	1, 308
Miscellaneous unmailable letters opened (disposed of as below).....	5, 567

Domestic third and fourth class matter:

Parcels opened and disposed of as below	76, 088
---	---------

Foreign matter:

Letters returned to country of origin or delivered to addresses..	486, 850
Letters on hand at close of year	8, 970
Parcels of printed matter, samples, etc., returned unopened or delivered to addresses	38, 982
	534, 802

Registered articles:

Domestic—

Of domestic origin, delivered unopened.....	2, 692
Of domestic origin, opened.....	2, 377
	5, 069

Foreign—

Returned to country of origin, or delivered to addresses	16, 904
On hand at close of year	343
	17, 247

Total	6, 479, 293
-------------	-------------

The following was the disposition of mail matter opened in the Dead-Letter Office:

Delivered:

Letters containing money.....	14, 764
Letters containing drafts, money-orders, notes, etc.....	22, 873
Letters containing postal-notes.....	3, 148
Letters containing miscellaneous papers, etc	34, 207
Letters containing postage-stamps.....	120, 552
Letters containing nothing of value.....	1, 838, 768
Photographs	32, 410
Parcels of merchandise, books, etc.....	29, 775
	2, 096, 497

Returned to owners and awaiting evidence of delivery :		
Letters containing money	1,171	
Letters containing drafts, notes, etc	892	
Letters containing postal-notes	193	
		2,256
Under treatment, looking to delivery :		
Letters containing money	2,152	
Letters containing drafts, money-orders, notes, etc	164	
Letters containing postal-notes	12	
Letters containing miscellaneous papers, etc	127	
Letters containing postage-stamps	501	
Letters containing nothing of value	19,349	
Photographs	112	
Parcels of merchandise, books, etc	409	
		22,826
Filed upon failure to deliver, subject to reclamation :		
Letters without inclosures	6,925	
Letters containing drafts, notes, etc	1,076	
Letters containing postal-notes	279	
Letters containing miscellaneous papers, etc	12,015	
Letters containing postage-stamps	3,442	
Photographs	8,237	
Parcels of merchandise, books, etc	41,559	
Unmailable letters	1,642	
		75,175
Destroyed :		
Letters without inclosures, which could not be returned to writers	3,508,645	
Parcels containing pamphlets, fruit, seeds, medicines, etc	15,626	
Letters containing postage-stamps	3,233	
		3,527,504
Grand total		5,724,258

FOREIGN DEAD MAIL MATTER.

Returned to country of origin ;		
Registered articles	16,514	
Ordinary letters	481,022	
Parcels of printed matter, samples, etc	35,031	
		532,567
Delivered to addresses on application :		
Registered articles	182	
Ordinary letters	202	
Parcels of printed matter, samples, etc	631	
		1,015
Misdirected matter forwarded to corrected addresses:		
Registered articles	208	
Ordinary letters	8,166	
Parcels of printed matter, samples, etc	3,320	
		11,694
On hand under treatment at close of year :		
Registered articles	343	
Ordinary letters	8,970	
		9,313
Grand total		554,589

MATTER RETURNED FROM FOREIGN COUNTRIES.

The number of pieces of mail matter originating in the United States and returned to Dead-Letter Office as undeliverable, were classified as follows :

Registered articles	1,814
Ordinary letters (including postal-cards)	192,097
Parcels of printed matter, samples, etc	44,570
Total	238,481

DEAD REGISTERED MATTER.

Of the 21,935 unclaimed registered letters and parcels received there were—

Delivered to addressees or restored to senders.....	20,683
Returned to postmasters for delivery and awaiting receipt	184
Filed upon failure to discover ownership and awaiting reclamation.....	1,068
Total.....	21,935

VALUE OF INCLOSURES IN MAIL MATTER RESTORED TO OWNERS.

The following shows the number of letters restored to owners or in course of restoration, with the character and value of contents:

Description.	Number.	Value.
Letters containing money restored to owners.....	14,764	\$25,566.66
Letters containing money outstanding in the hands of postmasters for restoration to owners.....	1,171	4,234.19
Number of letters containing drafts, checks, notes, money-orders, etc., restored to owners.....	22,873	1,444,805.92
Number of letters containing drafts, notes, checks, money-orders, etc., outstanding in the hands of postmasters for restoration to owners.....	892	55,121.36
Number of letters containing postal notes restored to owners.....	3,148	4,698.07
Number of letters containing postal notes outstanding in the hands of postmasters for restoration to owners.....	193	482.92

REVENUE DERIVED FROM DEAD MAIL MATTER.

The amount of revenue derived from dead matter during the year and delivered to Third Assistant Postmaster-General for deposit in the Treasury is shown by the following statement:

Amount separated from dead letters that could not be restored to owners.	\$9,447.73
Amount realized from auction sale in December, 1888, of parcels of merchandise which could not be restored to owners.....	2,655.99
Total.....	12,103.72
* * * * *	*

It will be observed that of the 76,088 parcels of third and fourth class matter received during the year, 48,603, or about 64 per cent., were sent to this office as unmailable because they were insufficiently prepaid, misdirected, unaddressed, or were mailed in violation of some provision of the Universal Postal Union Convention, and could not therefore be forwarded.

Free-delivery offices are required to make their returns of dead matter by registered mail, and a large number of other offices have adopted the same rule. The whole number of registered parcels of this character received during the fiscal year, the contents of which were distributed among the several divisions of the office for treatment, was 45,228. The number received during the preceding year was 40,129, showing an increase during the last year of 5,099.

Attention is also called to the fact that there was an increase of 308,959 pieces of mail matter opened and returned to writers over the number delivered during the preceding year. This was accomplished by extra hours of labor, performed under the order of the Postmaster-General of March 21, 1889.

The large amount of mail-matter sent to this office yearly, which, owing to the constant increase of the postal service, is not likely to be materially reduced in the future, requires, in my judgment, an increase in the clerical force to promptly and properly treat the same, as contemplated by the Postal Regulations.

Therefore I would most respectfully recommend an increase in the number of employés of this office sufficient to meet the demands of the service.

It is not only gratifying to me but just to the chief clerk, the clerks in charge of the several divisions, and all the employés of the office that I should testify to the fidelity and zeal with which they have performed their duties. It would otherwise have been impossible to properly dispose of the work which devolved upon the office.

All of which is respectfully submitted.

I am, very respectfully, sir, your obedient servant,

Hon. JOHN WANAMAKER,
Postmaster-General.

GEO. B. HALL,
Superintendent.

REPORT OF THE AUDITOR OF THE TREASURY FOR THE POST-OFFICE DEPARTMENT.

OFFICE OF THE AUDITOR OF THE TREASURY FOR THE POST-OFFICE DEPARTMENT, *Washington, D. C., November 9, 1889.*

SIR: I have the honor to submit herewith the annual report of receipts and expenditures of the Post-Office Department, as shown by the accounts of this office, for the fiscal year ended June 30, 1889. All expenditures on account of service of last and prior fiscal years are stated to September 30, 1889, as in former reports.

REVENUE ACCOUNT OF THE POST-OFFICE DEPARTMENT.

Service of the fiscal year 1889.

Postal revenues of the year ended June 30, 1889.....	\$56,175,611.18
Expenditures to September 30, 1889.....	61,376,847.24
Excess of expenditures over all revenues.....	5,201,236.06
Amount placed with the Treasurer to the credit of the Department, being grants from the General Treasury in aid of the postal revenues under section 2 of the act approved July 24, 1888. (Statutes, vol. 25, chapter 702, page 347).....	4,500,000.00
Excess of expenditures over grants.....	701,236.06
Amount of balances due from late postmasters closed by—	
Suspense.....	\$2,507.72
Bad debts.....	7,868.33
Compromise debts.....	17,220.21
Net loss by suspense, bad and compromise debts.....	27,596.26
Amount to be placed with the Treasurer.....	728,832.32

Service of the fiscal year 1888.

Amount placed with the Treasurer to the credit of the Department, being grants from the General Treasury in aid of the postal revenues under section 2 of the act approved March 3, 1887. (Statutes, vol. 24, chapter 388, page 570).....	\$1,135,287.40
--	----------------

Amount to be placed with the Treasurer of the United

States, as shown by the report for the fiscal year 1888. \$535, 287. 40
 Expended from October 1, 1888, to September 30, 1889.. 490, 073. 70

\$1, 025, 361. 10

Balance available on account of fiscal year 1888 109, 926. 30

Service of the fiscal year 1887.

Balance available September 30, 1888..... \$380, 675. 34
 Expended from October 1, 1888, to September 30, 1889 55, 712. 25

Balance to be placed in the General Treasury 324, 963. 09

Service of the fiscal year 1886.

Balance unexpended October 1, 1888, certified to the General Treas-
 ury, report 205, warrant No. 2542, Washington, dated January 4,
 1889 \$1, 719. 39

Claims, 1886 and prior years.

Amount expended from October 1, 1883, to September 30, 1889..... \$29, 274. 80

Amount placed with the Treasurer to the credit of the Department,
 being grants from the General Treasury in aid of the postal reve-
 nues under act—

October 19, 1888 (section 1, Statutes, vol. 25, chapter
 1210, page 580) \$120. 32

October 19, 1888 (section 6, Statutes, vol. 25, chapter
 1210, page 606) 1, 831. 20

March 2, 1889 (section 2, Statutes, vol. 25, chapter 410,
 page 935) 14, 151. 46

March 2, 1889 (section 3, Statutes, vol. 25, chapter 410,
 page 939) 13, 912. 05

30, 015. 03

Balance available on account claims 1886 and prior years..... 740. 23

Claims, 1885 and prior years.

Amount expended from October 1, 1883, to September 30, 1889 \$2, 677. 04

Available October 1, 1888..... \$180. 25

Amount placed with the Treasurer to the credit of the
 Department, being grants from the General Treasury
 in aid of the postal revenues under act October 19, 1888.

(Section 3, Statutes, vol. 25, chapter 1210, page 601)..... 2, 677. 04

2, 857. 29

Balance available on account claims 1885 and prior years..... 180. 25

Compensation of postmasters and late postmasters re-adjusted and
 allowed under act March 3, 1883:

Expended from October 1, 1888, to September 30, 1889..... 362, 534. 33

Amount available October 1, 1888..... 306, 916. 56

Amount placed with the Treasurer in aid of the
 postal revenues, being grants from the General
 Treasury under act of October 19, 1888. (Section 6,
 Statutes, vol. 25, chapter 1210, page 606)..... 77, 038. 42

383, 954. 98

Balance available September 30, 1889..... 21, 420. 65

GENERAL REVENUE ACCOUNT.

Postal revenues for the year ended June 30, 1889..... \$56, 175, 611. 18

Expenditures for the service of 1889 \$61, 376, 847. 24

Expenditures for the service of 1888 490, 073. 70

Expenditures for the service of 1887 55, 712. 25

Expenditures for the service of 1886 and prior years
 (claims) 31, 951. 84

Expenditures for the service of 1886 and prior years for salaries of postmasters and late postmasters, re-adjusted under act of March 3, 1883.....		\$362, 534. 33	
Total expenditures to September 30, 1889.....			\$62, 317, 119. 36
Excess of expenditures over revenue.....			6, 141, 508. 18
Amount due from late postmasters on accounts closed by suspense.....		\$2, 507. 72	
Amount of balance due from late postmasters on ac- counts closed by bad debts and compromised debts.....		25, 088. 54	
Net loss by suspense, bad debts, and compromise debts.....			27, 596. 26
Excess of expenditures.....			6, 169, 104. 44
Grants from the General Treasury :			
Under act of July 24, 1888.....		\$4, 500, 000. 00	
Under act of March 3, 1887.....		1, 135, 287. 40	
Under act of October 19, 1888.....		81, 666. 98	
Under act of March 2, 1889.....		28, 063. 51	
Total grants.....			5, 745, 017. 89
Excess of expenditures over grants.....			424, 086. 55
Amount of grant to the General Treasury to repay, of the postal de- ficiency appropriation for 1886, the sum drawn in excess of actual deficiency (paid to the Treasurer by warrant No. 2542, dated Janu- ary 4, 1889)			1, 719. 39
Total excess of expenditures over receipts			425, 805. 94
The balance standing to the credit of the general revenue account September 30, 1888.....			3, 587, 349. 15
The balance standing to the credit of the general revenue ac- count September 30, 1889.....			3, 161, 543. 21
Of which there was due by late postmasters, in suit.....			297, 396. 27

POSTMASTERS' QUARTERLY ACCOUNTS CURRENT.

The net revenues of the Department from postages, being aggregate revenues at post-offices for the fiscal year, less the compensation of postmasters and clerks and the contingent office expenses, were :

For the quarter ended—		
September 30, 1888.....	\$7, 317, 807. 58	
December 31, 1888	8, 692, 598. 40	
March 31, 1889	8, 856, 275. 24	
June 30, 1889	7, 957, 405. 96	
Total.....		32, 824, 087. 18

The number of quarterly returns of postmasters received and audited, on which the above sum was found due the United States, was :

For the quarter ended—		
September 30, 1888.....	59, 067	
December 31, 1888.....	59, 447	
March 31, 1889.....	60, 039	
June 30, 1889	63, 959	
Total.....		242, 512

STAMPS SOLD.

The amount of stamps, stamped envelopes, newspaper wrappers, and letter-sheets, and postal-cards sold was :

For the quarter ended—

September 30, 1888.....	\$12, 104, 991. 74
December 31, 1888.....	13, 741, 064. 97
March 31, 1889.....	14, 056, 296. 48
June 30, 1889.....	13, 050, 748. 64

Total.....	52, 953, 101. 83
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LETTER POSTAGES.

The amount of postage paid in money was..... \$176, 612. 28

Included in the above amount are the following sums paid

by foreign countries in the adjustment of their accounts:

Kingdom of Great Britain and Ireland.....	\$26, 477. 72
Empire of Japan.....	5, 252. 97
United States of Colombia.....	5, 299. 98
Dominion of Canada.....	79, 028. 32
Republic of Chili.....	5, 414. 12
Republic of Venezuela.....	637. 33
Republic of Mexico.....	20, 147. 71
Republic of Honduras.....	1, 517. 00
Republic of Salvador.....	1, 067. 03
Republic of San Domingo.....	310. 00
Republic of Guatemala.....	517. 23
Swiss Republic.....	681. 03

Postal administration of—

Costa Rica.....	1, 064. 04
Curacao.....	841. 96
Hawaii.....	3, 098. 54
New South Wales.....	497. 51
New Zealand.....	1, 205. 29
St. Lucia.....	7. 06
Straits Settlement.....	1. 79
Trinidad.....	27. 78
Bermuda.....	3, 168. 74
Bahama.....	200. 00
Queensland.....	128. 53
Victoria.....	271. 90
Hong Kong.....	1, 035. 83
Tobago.....	6. 27
Grenada.....	7. 28
Turk's Island.....	74. 56
St. Vincent.....	6. 09
Tasmania.....	21. 96

158, 015. 57

Balance collected by postmasters.....	18, 596. 71
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The following balances were paid and charged to the appropriations for balances due foreign countries :

Service of 1889:

Empire of Germany.....	\$18, 638. 31
International Bureau, Berne, Switzerland.....	680. 07
Kingdom of Italy.....	8, 470. 56
Kingdom of Belgium.....	12, 080. 89
Kingdom of Denmark.....	12, 478. 87
Kingdom of Norway.....	561. 28
Kingdom of Sweden.....	3, 374. 85
Kingdom of The Netherlands.....	1, 014. 39
Dominion of Canada.....	134. 51
British Guiana.....	26. 60
Bulgaria.....	1, 510. 21
Roumania.....	1, 189. 98

Total for 1889.....	\$60, 160. 52
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Service of 1888:

Empire of Germany.....	\$23,552.13	
Kingdom of Italy.....	14,787.71	
Kingdom of Sweden.....	4,251.91	
Barbadoes.....	69.69	
Total for 1888.....		\$42,661.44
Aggregate amount paid.....		102,821.96

MAIL TRANSPORTATION.

The amount charged to "transportation accrued" and placed to the credit of mail contractors and others for mail transportation during the fiscal year was:

For the regular supply of mail routes.....	\$27,895,765.21	
For the supply of special offices.....	51,609.16	
For the supply of mail-messenger offices.....	928,770.99	
For the salaries of railway postal clerks.....	5,233,824.96	
For the salaries and expenses of the superintendents of the railway mail service.....	62,601.43	
Total.....		34,172,571.75

FOREIGN-MAIL TRANSPORTATION.

New York, Great Britain and Ireland, and countries beyond, via Great Britain.....	\$162,312.08	
New York, Great Britain, and Germany, and countries beyond.....	220,127.99	
Philadelphia, Great Britain, and Ireland.....	1.10	
Boston, Great Britain, and Ireland.....	1,505.79	
New York, Baltimore, Philadelphia, Boston, Key West, New Orleans, and San Francisco, West Indies, Central and South America, Mexico, etc.....	74,688.06	
Boston and Nova Scotia.....	790.72	
Upper Pacific coast.....	1,473.10	
San Francisco, China, Japan, Farther India, Australia, and South Sea Islands.....	59,563.31	
Boston and West Coast of Africa.....	.90	
Expenses of Government mail agent at Panama.....	853.59	
Total foreign mail.....		521,316.64
Total transportation accrued.....		34,693,888.39
The amount credited to "transportation accrued" and charged to mail contractors for overcredits, being for fines and deductions, was.....	256,757.26	
The amount of fines and deductions remitted was.....	66,482.68	
Net amount of fines and deductions.....		190,274.58
Net amount of "transportation accrued".....		34,503,613.81
The amount paid during the year was.....		32,416,882.21
Excess of "transportation accrued".....		2,086,731.60

PACIFIC RAILROAD SERVICE.

Included in the above amount of "transportation accrued" are the following balances for the transportation of the mails over Pacific railroads, which have been certified to the Register of the Treasury. The amount is not charged to the appropriation for "inland transportation, railroads," and is not, therefore, included in the total of transportation paid.

Regular service, 1889:

Union Pacific Railway Company (old Union Pacific Railroad Line), aided.....	\$419, 883. 36	
Union Pacific Railway Company (old Kansas Pacific Line), aided portion.....	69, 533. 88	
Lines operated, leased, or controlled by the Union Pacific Railway Company, non-aided portion.....	328, 763. 42	
Central Pacific Railroad Company, aided portion.....	306, 452. 76	
Sioux City and Pacific Railroad Company, aided portion	9, 451. 00	
		<u>\$1, 134, 084. 42</u>

Use of postal cars, 1889:

Union Pacific Railway Company (old Union Pacific Railroad Line), aided	\$74, 695. 83	
Lines operated, leased, or controlled by the Union Pacific Railway Company, non-aided.....	6, 213. 36	
Central Pacific Railroad Company, aided.....	37, 407. 72	
Sioux City and Pacific Railroad Company, aided.....	1, 272. 00	
		<u>\$119, 588. 91</u>

Regular service, previous years:

Lines leased or controlled by the Union Pacific Railway Company, non-aided, 1888.....	1, 289. 78	
Central Pacific Railroad Company, aided, 1887.....	250. 78	
Union Pacific Railway Company (old Kansas Line), aided, 1888.....	217. 42	
		<u>1, 757. 98</u>

Total Pacific railroad service not paid 1, 255, 431. 31

Amounts previously reported "certified to the Register of the Treasury," charged back by order of the Secretary of the Treasury. (See letter of June 23, 1887.)

Regular service, 1887:

Sioux City and Pacific Railroad Company, aided.....	\$4, 676. 12	
Sioux City and Pacific Railroad Company, non-aided.....	681. 19	
		<u>\$5, 357. 31</u>

Use of postal cars, 1887:

Sioux City and Pacific Railroad Company, aided	649. 12	
Sioux City and Pacific Railroad Company, non-aided.....	119. 66	
		<u>768. 78</u>

Regular service, 1888:

Sioux City and Pacific Railroad Company, aided.....	9, 451. 00	
Sioux City and Pacific Railroad Company, non-aided.....	1, 265. 48	
		<u>10, 716. 48</u>

Use of postal cars, 1888:

Sioux City and Pacific Railroad Company, aided	1, 186. 10	
Sioux City and Pacific Railroad Company, non-aided.....	283. 75	
		<u>1, 469. 85</u>

Total to be paid 18, 312. 42

STATEMENT OF PAYMENTS TO AND COLLECTIONS FROM LATE POSTMASTERS.

Amount collected during the year from late postmasters....	\$86, 526. 27	
Amount charged to suspense	10, 261. 50	
Amount charged to bad and compromise debts	27, 771. 40	
		<u>\$124, 559. 17</u>
Amount paid during the year to late postmasters.....	149, 329. 05	
Amount credited to suspense.....	7, 753. 78	
Amount credited to bad and compromise debts.....	2, 682. 86	
		<u>159, 765. 69</u>
Amount remaining due postmasters, becoming late during the fiscal year ended June 30, 1889		45, 634. 18

STATEMENT OF POSTAL ACCOUNTS OF LATE POSTMASTERS IN SUIT
ON JUNE 30, 1889.

Amount of postal accounts of late postmasters in suit on June 30, 1888.....	\$250,355.28	
Amount of postal accounts of late postmasters submitted for suit during fiscal year ended June 30, 1889.....	65,455.43	\$315,810.71
Amount of postal accounts of late postmasters collected during the fiscal year ended June 30, 1889.....	9,476.09	
Amount of postal accounts of late postmasters otherwise settled during fiscal year ended June 30, 1889.....	8,938.35	18,414.44
Balance of postal accounts of late postmasters remaining in suit on June 30, 1889.....	297,396.27	
Amount of interest and costs collected in suits against late postmasters and sureties on postal accounts during the fiscal year ended June 30, 1889.....		\$1,137.62
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Very respectfully,

T. B. COULTER,
Auditor.

Hon. JOHN WANAMAKER,
Postmaster-General.

No. 17.—Recapitulation of net revenue.

Revenue on domestic money-order transactions.....		\$583,864.70
Revenue on postal-note transactions.....		127,909.45
Revenue on transactions with—		
Canada.....	\$15,128.74	
Great Britain and Ireland.....	27,881.39	
Germany.....	39,458.72	
Switzerland.....	12,620.86	
Italy.....	24,799.07	
France.....	5,290.88	
Jamaica.....	489.02	
New Zealand.....	196.73	
New South Wales.....	231.41	
Victoria.....	208.73	
Belgium.....	950.36	
Portugal.....	67.13	
Tasmania.....	23.10	
Windward Islands.....	296.06	
Japan.....	193.31	
Cape Colony.....	32.29	
Hawaiian Kingdom.....	297.26	
Queensland.....	53.13	
Leeward Islands.....	59.05	
Netherlands.....	421.82	
Denmark.....	223.15	
	128,922.21	
Less loss on transactions with—		
Sweden.....	\$1,737.22	
Norway.....	1,254.33	2,991.55
		125,930.66
Total revenue.....		787,804.81

No. 20.—*Statement showing the weight of letters, newspapers, etc., sent from the United States to European countries during the fiscal year ending June 30, 1889.*

RECAPITULATION BY COUNTRIES.

Countries.	Letters.	Prints.
	<i>Grams.</i>	<i>Grams.</i>
England.....	118,682,410	584,119,984
Austria.....	11,105,350	26,049,405
Belgium.....	3,029,871	17,880,120
Denmark.....	4,477,575	9,772,195
France.....	18,422,561	90,179,866
Germany.....	58,006,952	234,361,869
Italy.....	13,986,870	47,058,330
Netherlands.....	3,337,725	12,429,940
Norway.....	9,481,530	17,578,435
Portugal.....	975,385	2,959,685
Russia.....	9,345,525	11,653,860
Spain.....	2,318,900	14,829,345
Sweden.....	19,304,416	49,863,060
Switzerland.....	5,080,470	25,690,755
Turkey.....	733,020	6,558,785
West Coast of Africa.....	255	6,770
Total.....	278,288,824	1,150,992,404
Increase compared with last fiscal year.....	14,737,880	126,105,037

REPORT

OF THE

SECRETARY OF AGRICULTURE.

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., October 26, 1889.

To the PRESIDENT :

I have the honor to respectfully submit my first annual report as Secretary of Agriculture, and the first report issued under the newly constituted Department of Agriculture.

I assumed the duties of my office March 7, 1889, or twenty-six days after the approval of the law creating an Executive Department of what had theretofore been a Bureau, in executive sense, of the Government. The Department had reached an important epoch in its history. For years there had been a demand on the part of a large majority of the farmers of the country that that Department at the seat of government which was organized to represent their interests should be clothed with the same dignity and power that other Executive Departments had, and that it should have its influence in national affairs and be recognized in the councils of the nation.

It is not necessary for me to dwell at this time upon the past growth of this institution; how there have been assigned to it from time to time additional duties and power, until now, when it comes forward as a completed wing of the executive branch of the Government, entitled to its full share of attention and protection, and needing at this time careful and intelligent effort in order that the foundation now ready to be laid shall be the commencement of a great and lasting Department, well fitted to extend its usefulness over a great agricultural domain. I deemed it my first duty, therefore, to give particular attention to such a re-adjustment of the current affairs of the Department as should make it better conform to its new relations under the law, and then to give careful thought to the formulation of plans for a thorough and complete reorganization of the new Department. I am not unmindful of the difficulties in the duties which have fallen to me in this regard, nor do I think that I shall overstate those to which I shall here refer.

At the very beginning I was disappointed to find that the appropriations made for the operations of the Department for the current fiscal year were those based upon the old organization of the Department, and that no provision had been made for a single anticipated want of the Department in its new field of duty. Therefore my first efforts had to be restricted to the study and formulation of plans for reorganization; to the systematizing of the records of the Department; to the consolidation, so far as possible under one head, of work of one character but being conducted in different divisions of the Department; to the formulation of a better system for the faithful accounting of public property, and in general the application of business-like principles throughout the Department. I have performed this duty while awaiting the meeting of Congress, when its attention might be called to the condition of affairs to which I have alluded, and to the urgent need of immediate attention.

Again, I found that during the growth of the Department to which I have heretofore referred, no adequate provision had been made in the mean time for additional space to meet its rapidly-increasing needs. The building it occupies was erected many years ago, and at a time when the future of the Department was problematical, and when its needs could not be anticipated. I found clerks crowded into rooms and subject to discomforts and inconveniences. I have found two branches of two distinct divisions crowded into one small room; records and books lying about upon tables and chairs for want of sufficient wall space to accommodate cases for their proper care and preservation; the chemical laboratory crowded into a damp, illy-ventilated, and wholly unsuitable basement, originally intended no doubt for storage purposes, and its work in certain investigations restricted because of the offensive fumes from such analyses, and because of the dangers to human life and limb from explosions of gases and other causes; and, in a word, there was a complete want of that systematic and orderly conduct of the public business which ought to obtain in every well-conducted office.

REORGANIZATION.

The immediate wants of the Department then, are, first, appropriations which must be made to meet the obligations of the Department to the country, which I deem urgent; and, second, a laboratory to be erected on the Department grounds, suitable for the purposes of important investigations which cannot now be undertaken. This building should be ready for occupancy at the earliest practicable day. To it I could remove certain scientific divisions and thus get much needed relief in the main building. In the mean time, I respectfully and urgently recommend that there be given me authority to rent some suitable building in this city to which divisions of the Department can be removed in order to temporarily relieve the necessity which confronts me.

Pending this necessary legislation I propose to complete plans, already formulated, for a reorganization of this Department, a portion of which has been anticipated in my estimates for the coming fiscal year. These estimates show a considerable increase over those of last year. Deducting the \$630,000 appropriated directly to the Experiment Stations of the country, there is left for the Department's needs \$1,359,000, an amount which should not be measured by the past, but rather by what a great agricultural country should pay at this time toward sustaining, protecting, and promoting a calling which lies at the foundation of its prosperity and power.

In other civilized countries, and especially in the newer countries of the world, among whom we are finding our most vigorous competitors, work analogous to that covered by this Department is prosecuted with a liberality and energy which, while it commands our respect, should not fail to serve as a warning that we ourselves must do our full duty in this matter if we expect to maintain our proud pre-eminence as the leading agricultural country of the world. Our sister republics in Central and Southern America and the Empire of Brazil have with few exceptions been devoting their best efforts, aided by liberal appropriations, to the application of science to agriculture, and this with marked success. To the north of us Canada, which has for years possessed a department of agriculture, has been working with creditable zeal on the same lines, and the same may be said of all the British colonies.

Turning our attention to the older countries of the world, we find a British department of agriculture, recently established, with an annual appropriation of a million and a half dollars at its command, while the same power combines Anglo-Saxon energy with the paternal government of the Latin races in its efforts to develop in India and in Egypt agricultural products commensurate to their teeming population and soil fertility. Germany annually expends \$2,850,000 for the same purposes. Brazil appropriated in 1885-'86 more than twenty millions of dollars for her agriculture, commerce, and public works, and Russia more than fourteen millions for agriculture and mines for the same period. France appropriated in 1886 more than eight million dollars for her agriculture alone, and Austria more than four millions during the same year.

It is my desire to organize the Department upon even a broader plane than these and other countries have established. To do so will require time and patience and that share of encouragement and support which I trust Congress will give to the Department and to the efforts of its officers.

ASSISTANT SECRETARY.

Among the features of the new law applying to this Department was a provision for an Assistant Secretary of Agriculture. Thanks to the wisdom of your choice in the selection for this position of a gentleman combining a large experience in public affairs with a thorough knowledge of scientific agriculture and trained executive ability, I have been

enabled to meet a want that has long existed in the Department, and to take one of the most important steps toward its reorganization. I have divided the Department into two grand divisions, one embracing all those divisions, branches, and sections which involve more particularly administrative and executive features, and which have been retained under my personal supervision, and the other embracing those divisions which are engaged purely in scientific investigations, which have been assigned to the office of Assistant Secretary. This plan of reorganization has been in operation for some months, and its advantage in the administration of the Department's affairs is plainly evident.

PUBLICATIONS.

One of the first conclusions forced upon me after a careful review of the valuable work of the several divisions of the Department in its application to the economy of agriculture, was the absolute necessity for prompt and effectual means of reaching the class the Department was primarily designed to serve, *i. e.*, the farmers. The very essence of the duties devolving on this Department of the Government is that its results shall be promptly made available to the public by a comprehensive scheme of publication. Time and expense, ability and experience, lavished on the work of this Department, can have no practical results unless we can lay their conclusions promptly before the people who need them.

The frequent issue of special bulletins from the various divisions relating to the work undertaken by them, instead of awaiting the issue of the annual report, already too bulky for the purpose for which I conceive it to be designed, meets with my unqualified approval, and I propose to greatly extend this practical method of intercommunication between the Department and its constituents. To reach the farmers of the country effectually, however, even more is needed than the issue of frequent bulletins in editions of 5,000 or 10,000 copies. Many of these are essentially and unavoidably scientific and the careful record of scientific investigations by scientific men, the value of whose conclusions must necessarily bear the scrutiny of scientific investigators the world over. The elimination of all scientific terms and language from such reports is impossible, while at the same time it is feasible and essential that all practical conclusions arrived at, as the result of scientific observation or investigation, must be so expressed as to be readily understood by all ordinarily intelligent people of average education.

Again, as to the number of copies required and the methods adopted for their circulation, it is clearly impossible to reach every farmer on the nearly 5,000,000 farms of the United States with all the bulletins emanating from this Department, nor is it desirable that every bulletin should reach every farmer. Farming is becoming more and more differentiated, not only into main divisions naturally created by limita-

sions as to climate and soil, but into minor divisions or specialties due to the larger experience, the higher degree of skill required in the present day to enable a farmer to prosecute his work successfully, and to which but very few men can attain in more than one or two specialties or branches of farming. Herein we find another strong argument for the diffusion of the results of our Department work in the form of special bulletins, convenient in form, promptly printed, and easily distributed.

The points to be covered in this direction may then be thus briefly summarized :

- (1) Frequent publication of the results of scientific work in the various divisions, in the form of special bulletins.
- (2) The observance, as far as practicable, of such language as will render the contents of each bulletin available to the average layman.
- (3) A method of distribution which will secure the circulation of the Department bulletins among those who will make practical use of them.
- (4) The widespread publication of the practical conclusions of the scientific observations or investigations undertaken in the various divisions, in a brief form and plain terms and on a scale so extensive as to practically reach all the farmers of this country.

To accomplish these four main objects I last July established a division in charge of a gentleman having special experience and qualifications for such work, and who will have general supervision of all the publications issued by the Department.

With a view to carrying out as far as possible the fourth proposition, upon which I lay particular stress, the plan adopted, and, as results so far show, with gratifying success, has been to prepare advance sheets of every bulletin or other publication about to be issued, such advance sheets comprising a brief synopsis of the work recorded in the bulletin and giving the conclusions arrived at which may serve as practical suggestions to the farmers. These advance sheets are furnished to the press associations, to all agricultural and many other weekly papers, to agricultural writers, and any journalists and editors applying for them. In this way, during the fifteen weeks ending October 31, no less than eighteen such synopses or résumés were distributed as above. It is a pleasure to record the fact that the agricultural papers generally and the press as a whole have shown a most commendable disposition to co-operate with the Department in its efforts to keep the farmers informed as to all that may be of practical service to them. In some cases a careful note kept of the newspapers publishing such advance sheets, apart from those covered by the press associations, indicate an aggregate circulation of over 1,000,000 copies.

A moment's consideration will show the value of a plan by which the benefits of a bulletin reaching 5,000 or 10,000 copies, and that by means of a circulation dragging along through many months, are communicated immediately to a circle of readers aggregating over three million persons, or nearly one-sixth of our entire adult farming population. Indeed this plan virtually covers the entire field, for the farmer who does not read some paper devoted to his calling is practically beyond the reach of intelligent effort on his behalf. It moreover invites application for special bulletins in advance of their publication by interested parties, an important consideration, for in the giving of valuable information "he gives twice who gives promptly."

The work of the new division in the review of the bulletins and other publications issued by the Department, is sufficiently indicated by the list of such publications forming a part of this report.

The work now engaging the attention of the several divisions of this Department is progressing satisfactorily, and I will here present for your information a résumé of what each is doing in its especial sphere. In conjunction therewith I also lay before you an outline of my plans for extending the work of these divisions, increasing their facility and enlarging their usefulness, plans which I consider essential to the successful prosecution of work which it is the duty of this Department to undertake.

DIVISION OF STATISTICS.

This branch of the Department service, relating to national resources and their development, to rural production and to distribution and consumption, is in my judgment one of the utmost importance. To aid in the collection of agricultural statistics there are over 11,000 volunteer correspondents, and a paid corps of agents in as many States as the limited appropriation allows the Department to maintain. These conduct a parallel investigation, by States, for verification and extension of the data communicated by the regular corps. What the system most lacks at present is the ability to maintain a paid statistical agent in every State. I would therefore urge the necessity of restoring, or even increasing, the original appropriation for collection of statistics, which has been reduced during the past four years, to render it possible to carry out the requirement for employing State agents for local investigations in every State, and for collection of such specific statistics as can not be obtained through the voluntary effort of our public-spirited farmers.

The office receives current official statistics from every part of the world, and files, records, co-ordinates, and elaborates such data for current publication and special use. These documents are both printed and written in all languages, in divers weights and measures, and values represented by the coins of the world. Their receipt is necessarily irregular, coming from near and distant parts of the globe, freighted

with news of crops ripening in every month of the year. There is great difference in the promptness of their preparation and in the degree of their accuracy, while many minor countries possess no statistical systems. These facts suggest the extent of the work and the difficulty of its efficient performance.

The work consists of the preparation of reports, investigation of industrial problems, collation of comparative international statements, responses to inquiries from foreign legations, from members of Congress, from rural and commercial bodies, and from editors and other publicists seeking information for immediate publication.

During the past year the official published reports have included the monthly series prepared by the Statistician, the annual report of statistics in the volume of Department reports published by Congress, and an album of agricultural statistics. The latter is the initial publication of a series of graphic illustrations of agricultural statistics which has been demanded by educators and agricultural writers for years, as a means of popularizing such statistics.

The material furnished to officials of this and other countries, industrial and commercial organizations, editors, and writers, in manuscript form, has been scarcely less voluminous than the publications.

The crop-reporting system, which has been copied in many foreign countries, and, in its main features, by our State statistical bureaus, while approximate and valuable, is in danger of becoming discredited by the popular acceptance of its results as exact in precision and absolute in authority. It should be remembered that they are not the conclusions of a thorough census, though they may be far better than the work of a poor census; that they are the consolidations of local estimates of agricultural experts, and are intended as a foil to the interested, biased, and untruthful statements that speculators issue to mislead their victims. It is recognized that producers, consumers, forwarders, and dealers in actual grain have a common interest in learning the exact truth of production.

The monthly crop reports of the Statistician are now limited to statistical correspondents and writers for the press, the brief telegraphic summary sent out on the 10th of each month being so sent out through the press associations. My present purpose is, that hereafter, at least during the crop season, a more extended summary of each forthcoming report shall be prepared, in advance of its regular circulation, of which a large edition may be printed for transmission to agricultural and other weekly papers, to postmasters, farmers, and any others who desire to receive it.

THIS YEAR'S CROPS.

The statistical records of the season indicate an average yield of cereals, a full supply of meats of all kinds, and a cotton crop adequate

for all demands. Potatoes have received some injury from rot, which has been more prevalent in the East than in the West. Fruits have been produced in only moderate abundance, apples especially yielding sparsely in the more favorable locations, and producing scarcely a third of a full crop. The increase in variety of fruits and in area occupied, in California and Florida, is yearly enlarging our resources and in some directions limiting importation of subtropical kinds.

The great crop of American arable culture, corn, is larger in breadth this year than ever before, comprising more than half the area of all cereals, and representing three-fourths of all the maize grown in the world. It promises slightly more than an average yield, which has been about 26 bushels per acre. Though slow in germination and early growth, in the Eastern and Southern States, from excess of moisture and low temperature, the season was long and frosts late, with freedom from droughts except in local and very limited areas.

The production of wheat has for several years been so large as to reduce the price to a point so low as to discourage growers. There has been an increase of demand, since 1880, due to increase of population, of 70,000,000 bushels, and a decline in foreign demand of about 65,000,000 bushels. The exportation of 1880-'81 was 186,321,514 bushels, in wheat and flour; the average for eight years since has been 121,300,638 bushels. This country still supplies the larger part of the European deficiency, which is much smaller than in the period of poor European harvests about ten years ago. The present crop will be a full average (between 12 and 13 measured bushels per acre), but the quality is below an average, with lower weight and bread-making capacity. There is an ample supply, however, for all probable European demands, though deficient yields elsewhere should tend to sustain if not to advance prices.

The product of cotton approximated closely 7,000,000 bales for the first time in 1884. The crops of 1887 and 1888 each attained about the same volume, and that of 1889 has a slightly increased area, while the October percentage of condition was somewhat higher than last year, giving promise of another large crop. Yet it is acknowledged to be late, subject to unusual injury from possible early frosts, and therefore as yet uncertain in its rate of production. It is gratifying to observe that this product still meets with ample demand and maintains its value in the markets of the world, the production of the United States as well as the world's consumption having nearly doubled within thirty years. There is no immediate prospect of the loss of this supremacy in cotton growing.

The necessity of economy in meat production has stimulated greatly the production of hay and dried forage, and the extension of the silo system, which has been encouraged by the demand for succulent feed, in the absence or scarcity of roots, has greatly enlarged the variety and volume of feeding material. In the arid regions alfalfa has absorbed a

considerable area of irrigated lands, and is assuming large proportions in the crop distribution of those areas. The increase of forage and hay is relatively greater in the South than in any other portion of the country.

THE ROCKY MOUNTAIN REGION.

The development of agriculture in the Rocky Mountain districts has been very rapid of late, and is full of promise for the immediate future. Millions of acres are already under irrigation, with results more certain and satisfactory than in States solely dependent on current rainfall. New enterprises are in progress, and Government surveys for highland reservoirs have been initiated. Already the value of the products of agriculture on the Pacific coast, if not in Colorado, in the heart of the mountain system, is greater than that of the products of mining. The Division of Statistics, under my direction, is investigating these resources and measuring their development, with all the facilities at its command. The results will surprise the Eastern States with new views of the wealth and progress of the Great American Desert of the recent past.

The work of this division is presenting to the world the marvelous results of our agriculture, which supplies our rapidly-increasing population with rations greatly in excess, in quantity and variety, of any other nation on the globe, and appropriates a larger surplus, both in volume and proportion, to supply the deficiencies of foreign markets than any other country is able to spare.

It is gratifying to note the appreciation of the work of the Division of Statistics by statesmen, publicists, and statisticians of this country, and to acknowledge similar high commendations from prominent foreign editors, and from executive statistical officers of foreign Governments, some of whom have recently declared the body of agricultural statistics of the Department of Agriculture of the United States the best in the world.

It is proposed, in response to repeated inquiries, to give special attention to local statistics, to concise yet comprehensive agricultural surveys of States and Territories, which will give a fair and full showing of natural resources and their development, without coloring from local pride or pecuniary interest, and yet appreciative of natural advantages only partially improved. It is desirable that local capabilities should be accurately presented, and worthy of the confidence of those who discredit the extravagances of immigration solicitors and land speculators. The plain truth is quite as much as the eastern inquirer can be induced to accept. It is regretted that available means will only suffice for a beginning of this work, which should be presented hereafter more rapidly and promptly as statistical appropriations shall warrant.

It is my intention next year to make an effort, through the medium of our numerous county statistical correspondents, to bring the De-

partment into closer touch with the farming community at the county fairs held throughout the country. At a trifling expense these county statistical agents should be enabled to attend their several county fairs, armed with a commission to report to this Department as to the character and extent of their exhibits, both of field products and live stock, the amount of premiums conferred, manner of judging, etc. At the same time these agents would be authorized to secure for this Department, as far as practicable, samples of the finest exhibits of field products, thus furnishing the most tangible evidences as to the character of the products and the agricultural possibilities of all sections of the country. An immense amount of time and money is expended in the aggregate upon these county fairs. To what extent they may be made subservient to the duties of this Department is necessarily a matter of speculation, but I am convinced of the propriety of endeavoring to utilize these gatherings in some such way as I have indicated. Everything that leads to a more intimate acquaintance between the Department and the farmers throughout the country must be mutually advantageous.

DIVISION OF ENTOMOLOGY.

The results of the labors of this Division have been of great importance, and in no direction more than in the outcome of the effort to import the parasites and natural enemies of the Fluted Scale insect of California. The entomologist, after careful investigation, satisfied himself that this insect, which of late years has so seriously affected orange culture in southern California, was a native of Australia and was comparatively harmless there, owing to the natural enemies which kept it in check and which had not been imported into this country with it. Efforts, through correspondence, to import one of the parasites that had been studied proved but partially successful, and the Department was anxious to take advantage of the Melbourne Exposition to have agents visit Australia with the express object of helping to import these enemies of the Scale alive. Accordingly, an arrangement was made with the Department of State whereby two of the salaried agents of the Entomological Division were to be sent to Australia, the one with instructions to report on and send over the enemies of the Scale insect, the other to report to Mr. McCoppin, commissioner to the Melbourne Exposition, on the agricultural features of the exposition, the State Department defraying their expenses.

The results of this undertaking have more than justified the most sanguine anticipations. Several of the parasites have been introduced and acclimated, while one of the predaceous insects thus imported, viz., a lady-bird (*Vedolia cardinalis* Mulsant), has increased so enormously and is so active an enemy of the scale that several important orchards have already been completely freed from the pest by its agency, and despondency has given way to hope and confidence among California

orange-growers. This result furnishes a most striking illustration of wide-spread benefit resulting from scientific investigation and effort.

The year has been remarkable for the great prevalence of blights, both of a fungus and insect nature. The most serious insect outbreak of the year was the appearance in enormous numbers in the wheat-fields of Ohio, Indiana, Wisconsin, Michigan, and Illinois of the grain aphid. This insect remained in the fields in injurious numbers much later than in ordinary seasons, and the result has been considerable shrinkage of the crop in the infested States. This pest has been carefully studied and data have been collected for full report.

For the past few years there has been much complaint from the orange-growers of Florida of a new pest in the shape of a leaf-mite which causes an injurious shedding of the foliage in the winter, and which has made its appearance since the completion of the special investigation of the insect enemies of the orange. This mite has been the subject of special investigation during the year.

Much time has already been given to the thorough investigation of the horn fly, a pest to horned cattle newly imported from Europe. This insect was first noticed in this country rather more than two years ago in the vicinity of Philadelphia, and has since greatly increased and spread to the southward along the Atlantic States until it has now reached southern Virginia. It is a serious drawback to the stock and dairy interests of the localities which it has reached, very greatly reducing the condition of cattle and the yield of milk. The complete life history has been followed out and field experiments have been made which result in establishing satisfactory remedies and preventives.

The publication of the report of the investigations of the injury to the roots of peach and other crops in Florida by swellings caused by eel-worms has been unavoidably delayed on account of matters connected with the illustrations, but it has now been published as Bulletin 20 of this Division, and will doubtless prove of value not only to horticulturists and fruit-growers in the South, but to gardeners in other parts of the country, as allied worms are found throughout our entire territory.

The publications of the Division have also occupied a considerable portion of the time of the office force. The periodical bulletin, *Insect Life*, has been issued regularly every month, and its usefulness and popularity are shown by the great demand for it. The wisdom, which has never been questioned, of establishing this means of communication with the farmers and working entomologists has become more and more apparent, and the editing and oversight of its monthly numbers has come to be one of the most important of the Entomologist's duties.

The Bibliography of Economic Entomology which was ordered by Congress in July, 1882, is now nearly completed. The extent of the work made it advisable to publish it in several parts, and Parts I, II, and III are now rapidly going through the press.

SILK CULTURE.

The interest in silk culture still remains unabated. The correspondence in no other Division is more widespread or in larger proportions, showing a conviction in the public mind that success is possible. There seems to be no question that the mulberry tree can be grown and the cocoon produced economically in a large area of this country. The fact that this culture, up to the production of the cocoon, can be made largely a household affair, and needs no large expenditure of money, and that the sums, small though they be, realized from the sales of cocoons, would be a blessing to innumerable families, an income added to, without in any way interfering with, the regular occupation which provides daily support, leads me to desire to continue the work as laid down by Congress. The real question, however, is the market for the cocoons, which need to be reeled before the silk is fit for the spinner. In competition with the hand-reeling of other countries the industry here would fail, as the difference between the cost of reeling here and the cost there would manifestly be deducted from the price paid for the cocoons, and would so reduce their market price as to discourage the industry of raising them.

The prime effort of the Department in this work is properly in trying to perfect an automatic reel that shall substitute machinery for manual labor in reeling. While success in this direction is not yet secured, the prospects are sufficiently favorable to make me hopeful of ultimate good results. Mr. Philip Walker was dispatched to Paris a few months ago with instructions to study fully and carefully the whole subject of silk-culture, especially in its relation to our own efforts, and with a view of ascertaining what progress and improvements are being made abroad. He has not yet returned, and beyond the usual annual appropriation for the continuance of the work I must refrain from making specific recommendations until I have before me the results of his investigations.

CHEMICAL DIVISION.

The work of the Chemical Division has been vigorously carried on under disadvantages and discomforts to which I have heretofore alluded. In accordance with a law enacted at the last session of Congress, providing for an extension and continuation of the investigation of the adulteration of foods, drugs, liquors, etc., the division has completed two parts of Bulletin No. 13, consisting of Part 4, which treats of lard and its adulteration, and Part 5, which treats of baking powders, their manufacture, use, and chemical composition. In accordance with the requirements of the act alluded to, I shall, in due time, make a separate report to Congress of the operations of this division under the said appropriation. In addition to these investigations very complete analyses have been made of sorghum seed to establish their value as

a cattle-food, and investigations have also been made upon the seeds of *calacanthus* growing wild in the mountains of North Carolina, and which prove very poisonous to cattle eating them. From these seeds a new alkaloid has been separated and its properties described.

Important investigations have also been carried on in the Chemical Division to determine the influence of different kinds of food upon the composition of butter. These results have proved of the greatest interest, and have shown that the quality and composition of the butter are greatly influenced by the character of the food used.

SORGHUM AND BEET SUGAR.

The Chemical Division has also conducted during the past year additional experiments looking to the manufacture of sugar from sorghum and sugar beets. Chemical laboratories have been established in connection with sorghum sugar factories at Rio Grande, N. J., Morrisville, Va., Kenner, La., Cedar Falls, Iowa; and at the following points in Kansas, namely: Sterling, Ness City, Conway Springs, Attica, Medicine Lodge, Minneola, Mead, Arkalon, and Liberal. The results of the season's work are not yet fully collated, but a general idea of them may be expressed. In New Jersey and Virginia the late, wet spring and the remarkably wet summer prevented the maturity of the cane, and thus prevented the successful manufacture of sugar. The results obtained in Louisiana were of a mixed character. In some cases considerable quantities of sugar were made per ton of cane; in one instance over a hundred pounds; while in other instances the results were of a most disappointing character. The results of the experimental work at Cedar Falls, Iowa, were also of a discouraging nature. No sugar of any consequence was made; and it may be stated that while as far north as Cedar Falls molasses may be made with profit, it is probably too far north to permit of the successful manufacture of sugar from sorghum.

The results of the experiments in Kansas have shown that in the extreme western portion of the State the season proved too dry for the production of a crop of sorghum cane suitable for sugar-making. On the other hand, in the southern portion of the State, west and south of Wichita, fine crops of sorghum cane were produced, and sugar made in such quantities as to foreshadow the financial success of the industry in those localities and in places further south. The general result of the recent experiments in the manufacture of sugar from sorghum carried on by the Department has determined the localization of this industry, in so far as financial success is concerned, in the region indicated above. If success attend the sorghum-sugar industry in the future, there seems to be reasonable ground for believing that in the southern part of Central Kansas and in many parts of the Indian Territory, where the soil and climate are similar to that part of Kansas mentioned, it may especially

flourish. There are, perhaps, also other parts of the United States where similar success could be secured, but these have not yet been pointed out.

Important progress has also been made during the past year in the development of varieties of sorghum containing a higher content of available sugar than those heretofore grown. These experiments have been carried on at Sterling, Kans., and at College Station, Md. Similar experiments have also been conducted in connection with the manufacturing work at the places mentioned above. A large number of analyses have been made during the last year and the present season for the purpose of selecting for planting the seed of those varieties and individuals whose juices show the highest percentage of available sugar. The results have gone far enough to justify the belief that by a selection of this kind a permanent improvement can be secured. It is certain that should the sorghum-sugar industry prove successful the growth of the seed will be a separate business, controlled by experts and carried on under those conditions most favorable to the production of the highest content of sugar. What can be accomplished in this line has already been illustrated with the sugar-beet, and there is every reason to believe that equally favorable results can be secured with sorghum.

In regard to the beet-sugar industry, experiments have been made in various parts of the United States in the growth of beets and in the analyses thereof. Many of these analyses have been made in the chemical division of the Department at Washington, and show that there are many localities, especially in the northern portion of the United States and on the Pacific coast, suitable to the production of a sugar beet rich in saccharine matter. The successful experiments in beet-sugar manufacture in California have created a great deal of interest in various parts of the United States in this industry, and the Department has received many inquiries for information on this point. The chemical division is now collecting material for a full report on the beet-sugar industry in the United States, which it is hoped may be published early the coming winter.

BOTANICAL DIVISION.

Besides the general scientific work, which has been extensive, the special effort of the Division has been directed to grasses and forage plants, and more particularly to those adapted to the Southern States and the arid and semi-arid regions of the West. A grass station has been conducted in connection with the Mississippi Agricultural Experiment Station for that region of the South, and one is being established in co-operation with the Colorado Experiment Station, which, with the independent grass station established last year at Garden City, Kans., which has been enlarged and more fully equipped, inaugurates the line of experiments contemplated for the arid region. The results of the year's work in both regions have been eminently satisfactory.

What the Southern States need at the present time, agriculturally, more than anything else, is a productive grass. The desire is to place stations at two places other than that in Mississippi.

The problem the Department is seeking to solve in the arid region is an increase of forage on the non-irrigable lands. There is far less need of experiments on the irrigable lands. What they are capable of producing is almost beyond computation, but the question whether the 300,000,000 of acres and more outside of possible irrigation can be quadrupled in forage possibilities, is of immense import. It is believed that as nature has selected the grasses growing there a cultivation of the same must promote their productiveness in that locality, as it does other grasses elsewhere. Accordingly wild-grass-seeds are being collected and are to be propagated in the station there. The Department desires to establish, independently or in connection with the experiment stations, four more stations in the West, so as to cover all Western conditions.

The division has issued during the year Bulletin No. 8, entitled "A record of some of the work of the division, etc.," and has now in press a new revised edition of the "Agricultural grasses of the United States," a very comprehensive and practical treatise on this important product. It has distributed to seven of the Agricultural Experiment Stations each a herbarium of carefully mounted botanical specimens of grasses and species of our native grasses as types, material very much needed at those new stations for the successful development of their work. It has had agents in various regions not yet fully explored, botanically, to collect specimens for our national herbarium, which will enable us to assist further the agricultural colleges, and also to make exchanges with and contributions to various foreign scientific societies. I consider the work of this division as judiciously planned, and if continued on the lines which I propose it will place our botanical collection at the head, as it should be, of similar collections in the country, if not in the world.

During the past summer the chief of the division visited, by my direction, Kansas, Colorado, New Mexico, northwestern Texas, Arizona, California, and Utah, and spent two months in the investigation of the native grasses and of the climatic conditions of the arid districts, so as the better to be able to grapple with the forage problem of those States and Territories.

THE SECTION OF VEGETABLE PATHOLOGY.

The work in this section is very important. It covers the diseases of plants, their nature and treatment. During the last growing season agents were located in New Jersey, Delaware, Virginia, South Carolina, Mississippi, Missouri, Michigan, Wisconsin, and California to investigate the plant diseases peculiar to those localities—notably black-rot, downy mildew, and anthracnose of the grape, root-rot and rust of cotton, and pear and apple diseases. Special attention has been given to

the *blight* of the Le Conte pear in Southern Georgia, and to *peach yellows* in Maryland, Delaware, and other States. While successful treatment has not been reached in the former case, and the cause of the latter is still unknown, very substantial progress has been made in both, and in the latter there is promise of highly beneficial developments. It is too soon to predict as to the pear-blight, but the hope is awakened that a remedy can be found.

Within the last two or three years a most destructive disease of the grape-vine appeared in southern California, which promises, if not checked, to destroy utterly the production of grapes in that locality. An agent of the section was dispatched there last June who has instructions to remain on the ground indefinitely to study the nature of the disease, and, if possible, discover a remedy.

In all these cases the work has consisted largely of field examinations supplemented with microscopic work. The latter has given evidence that all the diseases, with the exception of the California vine trouble and the peach-yellows, are due to plant parasites, and from the evidence now at hand it is very probable that even the last two are caused by bacteria which attack the healthy plants as well as those lacking in maturity or vitality. Experiments are being conducted both in the field and in the laboratory to determine, however, the true nature of these diseases. The immense losses caused by them justify the amplest expenditures in seeking their natures and devising a remedy.

DIVISION OF ECONOMIC ORNITHOLOGY AND MAMMALOLOGY.

Two distinct lines of research are carried on by this division—one devoted to the study of certain species or groups of species which are harmful or beneficial from a directly economic stand-point, and particularly from the farmer's point of view; the other—equally or even more important—a study of the fundamental facts, principles, and laws which underlie the present geographical distribution of life.

The primary object of mapping the geographical distribution of species is to ascertain the number, position and boundaries of the faunal and floral areas of the United States, areas which are fitted by nature for the life of certain associations of animals and plants, and which, consequently, are adapted for the growth of certain vegetable products and for the support of certain kinds or breeds of stock. The results of this study of the natural *life areas* of the country are of the utmost value to practical and experimental agriculture, and are so intimately related to the work of the experiment stations that the investigations of the latter can not be fully utilized without a knowledge of the more important facts which the study of geographical distribution affords. The work of mapping the distribution of species has received as much attention as the limited funds at command would permit. The most important work in this line has been a systematic biological

exploration an area of about 5,000 square miles in extent in Arizona. This exploration was conducted by Dr. Merriam, Chief of the Division, assisted by Mr. Vernon Bailey, field agent, and resulted in the discovery of many species new to science, and in the acquisition of many facts of economic consequence. It was demonstrated that complete accord exists between the distribution of animals and plants, governed by physiographical conditions. The boundaries of the areas inhabited by certain associations of species of birds, mammals, and reptiles, were found to coincide with one another and with the boundaries of the areas inhabited by certain species of plants. The knowledge of this fact emphasizes the importance of the study of the flora of a region in connection with the study of its fauna.

In the first line of work may be noted the compilation and publication of the bulletin on the English sparrow, a volume of 405 octavo pages, the demand for which was so great that thousands of applications for it were received in advance of its publication. Although so short a time has elapsed since its appearance, some of its good effects are visible already in the successful efforts for the restriction and extermination of the sparrow. The study of the food of crows continues, and a bulletin will be ready for distribution before the close of another year. A full and copiously illustrated bulletin on hawks and owls is nearly ready for the printer. The collection of stomachs of birds believed to affect agricultural interests now number 10,675. More than 3,000 specimens of birds were received for identification between January 1 and October 1, 1889.

DIVISION OF MICROSCOPY.

The work of this Division is largely in the line of original microscopical investigation of food stuffs, including the condiments of commerce, and in preparing microphotographic illustrations of pure food products and of the adulterants used in them. The teas of commerce have been the subject of like investigation. It is found, it is claimed, that the leaf of the tea-plant has marked characteristics not found in any of the plant leaves used for adulterants. An extended investigation has been made relating to the color reactions of the pure native olive oil from California, and of its adulterants, such as cotton-seed oil, oil of sesame, oil of poppy seed, and peanut oil. It is claimed that there are very marked color differences.

THE TEXTILE FIBERS.

I have given much thought, since assuming my duties, to the subject of fibers, a subject whose importance can not be overestimated, and I have found a wide-spread interest in the matter of a promotion of the cultivation and manufacture of flax, jute, and ramie, and other textile fibers. The correspondence of the Department on this subject has be-

come very large. In the States of Indiana, Illinois, and all the Northwest, large amounts of flax are raised for the seed alone. The question now is, can not the fiber be utilized also? While the cultivation of jute and ramie can hardly be classed, as yet, beyond the experimental stage, enough has been grown to justify the belief that in most of the Southern States they can be produced in abundance and of good quality.

The question, therefore, is not so much whether this country can produce all these fibers as whether the farmer can find a market for those he may produce. The manual labor heretofore necessary in the separation of the fiber from the stalk has, in competition with the cheaper labor of other countries, rendered it impossible for the fiber industry here to maintain an economic standing, and our only hope lies in the invention of decorticating machines that shall take the dry stalk or the green one as the case may be, and produce in one, or at most two operations, the fiber in a short time with a minimum of cost and without the primitive manual labor incident to the rotting, breaking, hatcheling, pounding, etc.

Within the last five years the mechanical genius of both continents has been directed to the invention of machinery to accomplish these results. It is claimed emphatically that there are one or more such for the rendering of flax. Several machines and processes for the rendering of the ramie fiber, which is far more difficult than that of flax, are claiming public consideration, but the tests of their efficiency at this date, as reported to this Department, have not fully demonstrated their economic success. Still, there has been such substantial progress made in the last five years that we seem to be approaching the solution of the problem.

Seeing the importance of this subject, I have taken advantage of the presence at the Paris Exposition of a gentleman versed in this subject, and have commissioned him to investigate all the fiber machines on exhibition there, to visit all the flax and hemp growing countries of Europe, to examine the flax machines in operation and the ramie machines wherever tested, and to report thereon fully. I am seeking for information from every quarter likely to give it, and to do all that can be done to promote an industry that will, if successful, save to this country \$20,000,000 annually, and which may take the place of raising of wheat and other cereals in States where their production is not now profitable. I shall ask from Congress an appropriation to enable me to prosecute a more extended investigation of this subject.

AGRICULTURAL EXPERIMENT STATIONS AND OFFICE OF EXPERIMENT STATIONS.

As a central agency for the agricultural experiment stations of the country established by act of Congress it is the duty of the Department, through the Office of Experiment Stations, to indicate lines of inquiry for the stations, to promote the co-ordination of their work, to

furnish them needed advice and assistance, and to collate and publish the results of their experiments. To this end it conducts a large and increasing correspondence relating to the scientific, administrative, and general interests of the individual stations and the enterprise as a whole. Its representatives visit stations, agricultural colleges, and kindred institutions. It collects statistics and other information regarding agricultural science; compiles results of inquiry, past and present, in this country and in Europe, which are greatly needed and earnestly called for by the station workers and others interested in agricultural science; and puts the results of station work in practical form for general distribution in farmers' bulletins.

For the ensuing year this office needs means proportionate to the pressing demand for the enlargement of its work in all the lines named, including especially the collating of fruits of experience and making them available to the stations and the agriculture of the country and the promotion of inquiries of general importance in connection with the stations in different sections of the land. With other lines of inquiry, the study of the far-reaching problems relating to the food and nutrition of domestic animals and of man, and the systematic investigation of our soils, already begun in accordance with special provision by act of Congress, should be undertaken on a broad and scientific basis.

The development of the experiment-station enterprise in this country is a noteworthy illustration of the readiness of the American people to grasp and to utilize new and valuable ideas. Beginning only fourteen years ago, it has grown out to the farthest limits of the land, enlisted the best colleges and universities and the ablest investigators, and secured both State and national resources for its maintenance. It now employs nearly four hundred workers "to promote agriculture by scientific investigation and experiment," and to diffuse as well as increase the knowledge which improves farm practice and elevates farm life. It has the favor of a great army of practical farmers, to whom it has already brought substantial benefits. The experience thus far gained evinces the wisdom of Congress in distributing the work throughout the country where it may be adapted to the wants of the various sections, and placing it in connection with institutions of learning which are, in general, laboring faithfully to fulfill the trust imposed upon them.

Crudity and mistakes are here and there apparent. But the general effort of the stations toward the greatest usefulness, the wise action of the Association of American Agricultural Colleges and Experiment Stations, the cordial support of the people, State legislatures and Congress, and the practical results already obtained, imply that the national Government has made no mistake in undertaking this enterprise on a larger scale than has been attempted elsewhere in the world. At the same time we should remember that quality more than magnitude

decides the value of every enterprise, and that this one can attain its highest success only in proportion as the laws which underlie the practice of agriculture are discovered and made available to the practical toilers of the farm.

FORESTRY DIVISION.

Only very slowly are our people beginning to realize that our natural forest resources, subjected to wasteful methods and unprotected against the ravages of fire and other destructive agencies, are liable to deterioration if not exhaustion, although capable by the application of proper management of yielding continual crops of valuable material. Blind to the experience of other nations, we must learn by experience at home that the condition of our water-sheds and river systems is, to a large extent, influenced by the condition of our forest areas.

Forest management under existing circumstances does not attract private activity, and it would seem to be the duty of the Government to assume a more definite supervision of such forest areas as are still owned by it, and as occupy a position of importance in the regulation of water-flow and of other climatic conditions.

The relations which these forests bear to the water conditions and river systems of the Rocky Mountain region and to the problems of irrigation in the arid lands is a matter for grave consideration.

A further practical work would consist in experimenting as to the possibilities of reforesting the now treeless regions of our country.

This Division was designed to serve as a bureau of information in regard to the forestry interests of the country. Its work in the beginning was naturally tentative, and the information could only be of a general character, having in view primarily the creation of a more general interest in the subject. With the growth of interest in forestry and a better understanding of its usefulness and desirability, the information asked has become more specific, and to supply this better facilities are needed. We must be able to supply information as to the present extent, location, and condition of forest areas, their present yield and future promise, the progress of deforestation by various agencies, the progress of reforestation by private enterprise, and the bearing which these processes have upon lumber supply as well as upon the country at large. We are at present without definite knowledge of the extent, location, condition, and direct or indirect value of the forest property which has remained in the hands of the General Government much less of the forest conditions of the country.

Statistical information of this kind can be had only by means of a thoroughly organized canvass, with ample appropriations. The division has heretofore had to confine its work mainly to supplying such information as could be gained by scientific studies, by observation, by consulting the literature, foreign and domestic, on the subject with the view of advancing our knowledge of forest management and forest

planting, of the life history of our trees and of the properties of their timber.

The biological studies and the investigations into the technical properties of our timbers have been continued, and the publication of some of the monographs relating to the life history of our most important conifers is contemplated within the year.

The relation of various industries to forest supplies has been made the subject of inquiry, especially that of the cooperage industry, and the carriage and wagon manufacture.

The important question of substituting metal for wooden ties, treated of in Bulletin No. 1 of this division, has received additional consideration in Bulletin No. 3, published this year as a preliminary report of an inquiry into the practicability of such substitution and the extent to which it has taken place in this and foreign countries.

A full report on this subject, with additional information regarding the progress of the methods and application of wood-preserving processes, is in preparation.

The provision of the law which calls for the distribution of plant material could be satisfied only in a very limited way, in proportion to the limited appropriations.

The collection of information naturally leads to the collection of material from which information may be derived. Attention has, therefore, been given to the establishment of a collection of forest botanical specimens, the absence of which has been a long-felt drawback to the work of the Division. In addition, a tolerably complete collection of forest-tree seeds has been gradually brought together which permits the control as to kind of seeds purchased, and prevents the danger of substitution.

The library of reference books in forest literature of this and other countries, although by no means complete, has also been enlarged, so as to make the facilities of the Division for the student of forestry, in that respect at least, what they should be, the best in the country.

The magnitude of our forestry interest is best represented by the statement, based upon the best authorities available, that our present annual forest production amounts to \$700,000,000, a figure which it seems likely could, by judicious management of our present forest area, be maintained if not exceeded without impairment of the capital from which it is derived.

DIVISION OF GARDENS AND GROUNDS, HORTICULTURE, ETC.

The duties of this Division consist, partly, in keeping in proper condition the roadways, walks, trees, and crops on the forty acres of reservation known as the Grounds of the Agricultural Department; the management and care of the plants in the conservatories, propagating houses, and other glass structures; the introduction, propagation, and culture of economic or useful plants, and the distribution of such plants

in localities where climatic and other conditions seem favorable to their growth.

The main feature of interest in the ornamental portion of the grounds is the method employed in grouping trees and shrubs. These are arranged in strict accordance with a botanical classification, at the same time securing landscape-gardening effect.

The portion originally set apart for out-door propagation and for gardening purposes has been much abridged by the erection of buildings to accommodate the increasing operations of the Department; consequently the testing of new varieties of fruits, formerly a prominent feature in the work of this Division, has been virtually abandoned. The exposed position of the grounds also militates against the accuracy of such tests.

I would here refer to the recommendation made elsewhere in this report in regard to the Arlington estate. The work of testing these new varieties of fruits is too important to have been allowed to lapse. It ought to be resumed at the earliest moment practicable, and such a disposition of the 300 acres of the Arlington estate as is elsewhere proposed would enable the Department to resume its work under the most favorable circumstances.

In the propagation of plants intended for distribution a distinction is made between those of mere ornamental value and those that represent economic products; therefore, the introduction and propagation of specialties, of plants which are either new or rare, so far as relates to the value of their products, or older varieties which commend themselves for particular purposes for which their extension is deemed desirable, are the important considerations which govern operations in this line.

While the requests for plants are unlimited as to kinds, the Department reserves the prerogative of the selection of such as may be adapted to certain localities. In this discrimination the results of experiment with former introductions and distributions are duly considered.

As examples, the records of the Department show that the genus *Eucalyptus*, of reputed anti-malarial value, cannot withstand the climates north of latitude 29°. The quinine-bearing *Cinchonas* have been so far tried throughout the States that localities where further tests are wholly unnecessary are now well defined. The same tests have been made with the tea plant, the coffee plant, with olives, Japan persimmons, pine-apples, etc., so that the climatic conditions for their successful culture are sufficiently known to guide the Department in its further distributions of these plants.

As a main purpose of the Department is that of introducing, or assisting the introduction, of new or but little known useful plants, it will have served this purpose when these plants have either merited the attention of cultivators or have proved to be failures; in the former case

their further propagation is taken up by commercial growers, who can supply all demands, so that the services of the Department are no longer important in that particular plant, and its means can be directed and employed for other purposes of a similar character.

Urgent demands are constantly received from residents of the warmer climates of this country for all kinds of tropical plants, many of which, even if a suitable climate is found for their growth, can only be classed as ornamental plants; but useful plants of this nature, such as the vanilla, the chocolate, and others of similar habits and value, are distributed to some extent for trial; but the portion of this country, if any, suited to these, is very limited indeed.

SEED DIVISION.

The distribution of seeds to experiment stations and agricultural colleges has now become an important part of the work of this Division, and the wisdom of this course is so apparent that the policy of placing seeds of new and presumably valuable plants at the disposal of the officers of these institutions will be sedulously adhered to. From them the Department may reasonably anticipate getting such reports, including such data as the date of sowing or planting, the time of maturing and harvesting, the quantity of seed planted, the amount and quality of the product, the character of the soil and climate, as will enable the Department to arrive at reasonable conclusions as to the relative value of seeds so furnished, so that we may then be more certain of furnishing to our farmers in the various sections represented by these institutions, the seeds best adapted to their wants and most certain to insure them good returns.

With a view to securing the best seeds, I have made a departure from the methods heretofore in vogue by engaging the services of a special agent whose whole duty it is to visit, personally, different sections of the country and inspect, as far as possible, the product of seeds offered to the Department, and to look up such as seem to possess specially desirable characteristics. The work done in this line has more than justified the expediency of undertaking it. The results which may be secured by wise dissemination of seeds are of great value. By the substitution of superior varieties for such as have become deteriorated or diseased, and by the introduction of the seeds of new plants, through the cultivation of which the resources and wealth of our people may be largely increased, the producers of this country can not fail to reap very great benefits.

The distribution of seeds during the present Administration has, of course, not been very extensive, as this covers the season of least activity in such work; but the distribution of winter wheat has this year been greatly increased, and has attained that place in the full distribution which its evident importance warrants. I wish here to empha-

size the necessity of close observation of the products of those countries which compete with ours in the cereal markets of the world, and of procuring from time to time for experiment and analysis in this country the seeds of such varieties grown abroad as seem to have specially desirable qualities. The vast extent of this country, with its great varieties of soil and climate, justifies the belief that there is no cereal grown abroad which can not be equally well grown, and indeed improved, in some sections of this country. In pursuance of this consideration, I have caused to be purchased a suitable quantity of five superior grades of wheat grown on the shores of the Mediterranean, which will be carefully tested and judiciously distributed with due reference to conditions of growth.

In this connection I may state that especial care is being taken to discriminate in the distribution of all seeds according to the varying conditions of soil and climate. In the face of increasing competition, it becomes necessary that we should, in addition to advantages afforded us by cheap lands and facilities for transportation, strenuously guard that guaranteed to us by the superior excellence of our products to those grown elsewhere. This can only be done by constantly seeking out the best that there is, and securing its dissemination in sections of this country where it can best be grown. This excellence must moreover be made so apparent as to be undisputed. The time has come for chemical analysis to aid in determining the relative value of cereals whose merits on the market have hitherto been usually determined simply by the eye, and for this reason I trust the Chemical Division may be so liberally equipped as to enable this Department to carry out a careful comparison between home grown and foreign grains, proving conclusively, as I believe such a test will, the superiority of our cereals for milling purposes over those grown in competing countries.

The employment of a competent expert is contemplated in order that this Department may be enabled to exercise, in reference to cereals, the same duty as to inspection and nomenclature of different varieties which has been so efficiently performed in the botanical and pomological divisions in regard to grasses and fodder, plants and fruits.

In view of the growing tendency in the South to increase its grass products, a tendency which should be fostered by the Government, I have ordered a supply of Bermuda grass for distribution throughout the Southern States. The advantages of this grass for our southern latitudes are manifest and generally recognized, but being a very spare seeder, and the imported seed not always to be had and quite expensive, its cultivation on a large scale has not been feasible. I trust to be able to counteract these disadvantages by a liberal distribution, as it spreads rapidly by its rooting stems when once introduced, and will prove a valuable permanent pasture south of 36° north latitude.

DIVISION OF POMOLOGY.

Two important trips of investigation have been made during the present year. The Pomologist personally visited the State of Florida during the earlier months of the year that he might have a thorough and personal knowledge of the peculiar conditions existing there, and to see the citrus and other fruits in the orchard.

One of the regular employés of the Division was sent, in company with a special agent of national reputation, as an expert scientific pomologist, on an extended tour of investigation through the regions from Texas and Wisconsin to the Pacific coast. Much valuable information and a large collection of specimens of the wild fruits were secured. It is expected that this will materially add to the ability of this Department in assisting in the solution of the question as to what will be done with the arid regions.

The knowledge of those fruits which do or do not grow naturally in the unsettled portions of our country will, in a measure, indicate those of our cultivated kinds that may be expected to succeed or fail in those localities.

More than five hundred packages of fruits have been received within the year, and most of them were sent for the purpose of identification.

This is a matter that requires the most expert knowledge, carefully used, for the variations of climate often so change the size, color, flavor and season of ripening, as to deceive even the most experienced. However, with very few exceptions satisfactory conclusions have been reached.

It is often important, indeed essential, that the name of a fruit be known by the nurseryman or grower, for it would not be possible otherwise to intelligently propagate and distribute the trees or plants, or to cultivate and market the fruit to the best advantage.

It is the constant aim of this Division to keep fully posted as to all new fruits, whether good or bad, and to embody in the annual and special reports a statement as to the real value of each. Almost daily the Pomologist is called upon to pass opinion as to the merits of new varieties, and the greatest caution has to be exercised in the expression of such opinion.

Whenever it is possible to obtain new fruits that promise well they are distributed where they are most likely to succeed best. The Division co-operates with the State Experiment Stations in this regard, and with private experimenters of high repute.

Quite recently the first lot of named varieties of cocoanuts ever introduced into this country was imported from the Philippine Islands by this Division. Several other fruits have been introduced from Europe, India, and Japan, and arrangements have been made for procuring a number more.

THE FOLDING-ROOM.

The increase of labor in the Folding Division for the past few years has been very great. Looking back to the records of the Department prior to 1881, I find that the work in this Division was so light and comparatively unimportant as to not even be made the subject of a separate reference in the Commissioner's annual report. To go back to the date when it first assumed dimensions which seemed to call for such special distinction, 1881, I find that, including the special and miscellaneous reports, the total number mailed in that year by this Division was 259,000. Referring to the list of publications issued during the current year, I find that it has attained for the past nine months the very large number of 472,100. In addition, there is a very large amount of miscellaneous work, the increase in which has been even greater than in the number of reports mailed. In addition to this total of publications received of 472,100, there were also written franks and letters to the number of 801,500; advance sheets for the press, folded and directed, 60,000; packages of envelopes and paper sent to correspondents, 10,530, and return postal-cards mailed to the number of 20,000.

All this great increase of work has had to be performed with little or no increase in clerical force since the date mentioned, with no additional facilities, and I cannot insist too strongly upon the necessity of providing this division with such force and equipment as will enable it to do the work assigned to it promptly and efficiently. It is as objectionable as it is short-sighted that after expending a vast amount of time and labor in the preparation of important documents, the Department should, for want of adequate means, be hampered in its efforts to lay them before the people who need them.

I append a list of the publications issued from this Department during the current year, with the number of each published and distributed:

SUMMARY OF PUBLICATIONS OF THE U. S. DEPARTMENT OF AGRICULTURE,

Issued and distributed from January 1, 1889, to October 31, 1889 (nine months).

Annual Report, 1888.....	30,000
Statistical reports:	
Monthly reports, new series, Nos. 59 to 67, inclusive, 19,000 of each.....	171,000
Album of agricultural statistics.....	10,000
	----- 184,000
Botanical Division:	
Bulletins Nos. 8, 9, and 10, 5,000 each.....	15,000
Special bulletin on the agricultural grasses of the United States.....	10,000
	----- 25,000
Section of Vegetable Pathology:	
Nos. 1, 2, and 3 of the Journal of Mycology.....	4,100
Circular No. 8, pear-leaf blight, and apple powdery mildew ...	5,000
Special reports on peach blight and potato rot.....	2,000
	----- 11,100

Chemical Division:

Bulletin No. 13, parts 4 and 5, 10,000 each	20,000
Bulletins Nos. 20 and 21, 10,000 each	20,000
Bulletins Nos. 22 and 23, 5,000 each	10,000
	<hr/> 50,000

Entomological Division:

Insect Life, Nos. 7 to 12, inclusive, of vol. I, 5,000 each	30,000
Insect Life, Nos. 1 to 4 of vol. II, 5,000 each	20,000
	<hr/> 50,000

Forestry Division:

Bulletin No. 3	10,000
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Bureau of Animal Industry:

Report on hog cholera	10,000
Report of U. S. Board of Inquiry concerning epizootic diseases of swine	5,000
	<hr/> 15,000

Ornithological Division:

Report of ornithologist	2,000
Bulletin No. 1, English sparrow	15,000
	<hr/> 17,000

Office of Experiment Stations:

Bulletins Nos. 1 and 2, 5,000 each	10,000
Bulletin No. 3	10,000
Miscellaneous Bulletin No. 1	5,000
Farmers' Bulletin	50,000
Special Circular No. 7	5,000
	<hr/> 80,000

Total	472,100
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THE LIBRARY.

An essential to efficient work is a well-selected and well-stocked library, which shall cover all the lines of inquiry of agriculture and agricultural science. It is useless to attempt to do first-class work that shall pass the scrutiny of the sharpest criticisms without having at hand what has been done and said in the past, and what is constantly coming in from a prolific press. Our library, of something like 20,000 volumes only, is specially weak in the Government publications, some of which are of rare merit; in the agricultural reports of the several States, for which there is great demand; in general agriculture, without which no one can well treat agriculture historically; in foreign agricultural reports and publications, without which in these times of cosmopolitan thought and work no such library as ours is properly equipped, and in several lines specially needed by the respective Divisions of the Department. All the Divisions need strengthening. The library has but a fugitive volume or two of any herd book, and is so woefully lacking in many lines that I refrain from further specifying.

In the change of the library from the old room, which was so small as to compel a suspension in a measure of the collection of more books and the rejection of the Government publications, to ampler quarters,

it was, for want of help, badly disarranged, so that what we had was so difficult to find that it was almost a bar to any attempt to make a comprehensive study of any topic. A special effort has been made to rearrange and reclassify it, and we now hope for a more satisfactory use of what we have, and for an appropriation sufficient to fill up the gaps and place it on a proper footing.

THE MUSEUM.

I am making an effort to place the Museum on a broader basis, not so much in the line of curiosities, which will not be ignored, as in the exhibit of the agricultural products of this and other lands. I am also endeavoring to procure samples of the four hundred and more supposed varieties of wheat grown in this country; likewise of all the varieties of corn, oats, and other cereals. With the collection of such an exhibit must be associated an expert, who shall, as elsewhere stated, be able to detect synonyms, and who shall be competent to pass judgment upon the changes marking the growth of the same variety in different latitudes and under different conditions of soil and climate. The importance of having a standard for the naming of the varieties is becoming more and more apparent. This is true likewise in relation to fruits. The new varieties now being so rapidly developed by the horticulturists of the country will soon swamp their nomenclature unless some place for scientific classification be provided, and it is suggested that the proper place is in our Museum, which should become the great agricultural museum of the country.

The Museum is now specially strong in native woods, and has a fair exhibit of wools and textile fibers. The latter should be largely extended. The fabrics from agricultural products should have a much larger display, and models or drawings of agricultural implements, both ancient and modern, should find a place in it. In short, this Museum should at the same time be an instructive object-lesson of the agricultural products and possibilities of the country, and should be a standard for accurate knowledge and for practical and scientific reference.

AMERICAN AGRICULTURE AT THE PARIS EXPOSITION.

It must be gratifying to all American citizens to note the tribute paid to the excellence of our American agricultural products at the recent Paris Exposition. The late date at which the appropriation was made available for the work assigned to this Department was a serious drawback, but in spite of this fact the high place of American agriculture in the estimation of eminent foreign authorities is attested by the liberal share of awards conferred at Paris upon the United States agricultural exhibit. The thanks of the Department are due to those public-spirited citizens who cheerfully contributed in response to its invitation towards this exhibit.

CORRESPONDENCE.

The growing appreciation of the Department among the people has no better index than the increasing number of letters received. All the Divisions are nearly overwhelmed with the correspondence referred to them for consideration and reply, and from month to month and year to year the volume of it grows so as at times to almost cause suspension of regular scientific work.

These letters in large proportion are not the merely formal requests incident to departmental work, which any experienced clerk can answer, and which are increasing with accelerating rapidity, but relate to every possible question, from the most frivolous to the most abstruse, some of which may require days and perhaps weeks and the attention of several Divisions to investigate and properly answer. The Department, as now administered, is a bureau of information on all subjects relating to agriculture—from the weather, the crops, to the ravages of the smallest insect and the most minute fungus. The people are appreciating this personal information and this consideration of their difficulties, and we attempt to answer their inquiries promptly and thoroughly, promptness at times being the essence of value to the inquirer. As an indication of the magnitude of this line of work the reports to me show that there have been received and answered since January 1, 1889, the following number of letters :

By the Bureau of Animal Industry.....	2,000
By the Division of Botany.....	957
By the Office of Experiment Stations.....	4,220
By the Division of Pomology.....	1,600
By the Division of Entomology.....	2,851
By the Section of Silk culture.....	5,110
By the Section of Vegetable Pathology.....	2,000
By the Division of Ornithology and Mammalogy.....	3,254
By the Division of Forestry.....	1,000
By the Division of Accounts.....	5,875
By the Division of Chemistry.....	1,477
By the Division of Statistics.....	4,530
By the Division of Microscopy.....	550
By the Folding-room.....	1,500
By the Office of the Secretary.....	3,000
By the Office of the Assistant Secretary, since instituted, February 9, 1889..	750
Total.....	40,668

It must be borne in mind that these letters come from all sections of the country, from all classes and conditions, inspired by the wants of the most diversified country on the globe. This Department is for the people, for the struggling farmer, and there is no desire to abridge this labor, but my wish is to bring our work nearer their personal interests, and to make them feel, in every way possible, that we are helping them in their struggles, under, at times, adverse circumstances.

AGRICULTURAL ORGANIZATION.

In 1885 this Department prepared a directory of the officers of agricultural associations and organizations, local, State, and national, which then included some 5,000 names. I have just completed a similar work for the current year which includes over 9,000 names. These associations represent so many centers of agricultural thought and effort at self-improvement, including a membership composed almost exclusively of practical farmers associated together in an effort to better themselves by improvement in methods and by the diffusion of greater light on the farming industry. I can not conceive of any more important duty devolving on this Department than that of giving aid and encouragement to these farmers in their effort to better their condition, an effort whose success means an addition to the wealth of the country. The least that should be expected of this Department is that it should furnish one set of its publications to any or all of these associations for the use of its members, and yet the largest printing appropriation ever devoted to the service of this Department would be quite inadequate to the purpose. To such an extent, however, as the liberality of Congress will permit, I shall make it my business to cherish to the utmost all such societies as are the outcome of a determined effort on the part of the farmers to help themselves. It is to be regretted that the narrow limits of the current year's printing fund forbids the publication of this directory for the present.

The figures here given afford eloquent testimony to the remarkable progress in the direction of self effort on the part of the farmers themselves. An increase of these organizations in four years at the rate of 1,000 a year is an evidence of this spirit which it should be the first duty of the Department to encourage. Another gratifying illustration of the same fact is the development of the

FARMERS' INSTITUTE.

Referring to these most useful meetings, I can not allow my first report as Secretary of Agriculture to go out without calling special attention to them. I regard this institute work as one of the most beneficent movements the agricultural history of this country ever has witnessed. My attention has been called to a bill introduced at the last session of Congress appropriating a liberal sum to establish, in connection with this Department, a division whose special duty it shall be to aid in the work of farmers' institutes throughout the country. I would merely say on this subject that it is a matter of no little gratification to me that this great work has nowhere been more fully tried than in my own State, where it was my privilege and pleasure to encourage it in every legitimate way, and nowhere has it reaped a more abundant harvest than in Wisconsin. Experience there and in other

States has fully demonstrated the extraordinary benefits arising from the institutes, and I am strongly of the opinion that, without going into details as to the precise way in which aid to the movement should be furnished, the National Government, in pursuance of the policy so strongly marked out by the establishment of the agricultural colleges and experiment stations, should put it in the power of the Department of Agriculture to foster and encourage the work of the institutes in the various States and Territories. The institutes have been justly designated the farmers' colleges. No truer title was ever conferred. I will only add that the strongest lever to raise and uphold the work of superior agricultural education represented by our system of agricultural colleges and experiment stations is to be found in this institute and kindred work.

BUREAU OF ANIMAL INDUSTRY.

The work of the Bureau in the control and eradication of contagious pleuro-pneumonia has been vigorously, and, I am happy to state, successfully prosecuted. Thanks to these vigorous measures, the contagion has not spread to any new districts, and the infected territory has been so steadily reduced in extent that it is now entirely confined to the States mentioned below. In New York the disease has been eradicated from Orange and New York Counties, and to-day is only found in Kings and Queens Counties, and is there much less prevalent than it was a year ago. The reports from New Jersey indicate that the disease has been practically stamped out, and there is every reason to believe that a few months of supervision will remove the last trace of the contagion. Only two small outbreaks have been reported from Pennsylvania within the past year. The first was effectually stamped out and measures promptly taken in regard to the second on receipt of the report of the State Veterinarian, and the slaughter of two affected animals seems to have removed all apprehension of further danger. But three affected herds have been found in Maryland the past six months, and there seems to be no likelihood of further trouble there. My intention is to maintain a sufficient force of inspectors in each of these States to establish a strict supervision of cattle for three or four months after the last appearance of the disease, thus insuring against any subsequent development of it. It is gratifying to recall that the effectual measures taken by this Department have almost entirely prevented the periodical rumors and subsequent panics among those engaged in the cattle trade which a few years ago were so frequent and so disastrous to the cattle industry.

The number of cattle purchased for slaughter from July 1, 1888, to June 30, 1889, in order to secure the eradication of the plague, has been: In New York, 1,460 diseased, 3,011 exposed; in New Jersey, 255 diseased and 880 exposed; in Pennsylvania, 15 diseased, 68 exposed; and in Maryland, 217 diseased, 624 exposed.

The number purchased per month gradually decreased until it became

much less than during corresponding periods of the preceding year. The total number of cattle found affected during the last-mentioned period with pleuro-pneumonia on *post-mortem* examination was: In New York, 1,561; in New Jersey, 302; in Pennsylvania, 29; in Maryland, 242; a total of 2,134. Reports received since June 30, 1889, indicate, as I have said, that the vigorous measures adopted have proved very effectual, and justify the most sanguine hopes in regard to the present control and complete eradication of the disease at an early date.

The large number of cases of the malignant disease disseminated by Southern cattle, known as Texas or splenic fever, led me to make regulations requiring special pens to be set apart in the leading stock-yards for the dangerous cattle; also providing for the cleaning and disinfection of the cars which had transported them. This has greatly reduced the losses, and when the regulations are perfected and thoroughly carried out the disease should be almost entirely prevented. With this malady the infection is generally spread through the channels of interstate commerce, and for that reason can only be effectually controlled by the Federal Government. For the protection of our citizens who purchase cattle in the great markets of the country, no less than for the reputation of the dressed beef which has become such an important factor in our domestic and foreign trade, the legislation relating to this subject should be ample and clearly defined.

MEAT INSPECTION.

Rumors of cattle diseases in this country having little foundation, if any, in fact, continue to be widely circulated in foreign countries to the great injury of our cattle trade. The existence of a demand for our surplus meat products in these countries is nevertheless plainly evident, and it is in the highest degree desirable that the Government of this country should adopt all means in its power to secure for our producers every opportunity to compete on fair terms in the markets of the world for the disposal of their surplus production. I would therefore insist most strongly upon the necessity of such a national inspection of cattle at the time of slaughter as would not only secure the condemnation of carcasses unfit for food, if there be any, and guaranty the accepted product as untainted by disease, but which should enable the national authorities to promptly discover any cattle-disease centers, thus putting it in the power of the Department to take immediate steps for its control and eradication.

While earnestly repudiating the captious objections made on the part of foreign authorities to the wholesomeness of our meat products, still, as long as we neglect to take the precautions universally adopted by the governments of those countries in which we seek a market for these products, and leave it to the officials of other countries to inspect our live cattle or our meats, it is impossible for us to present as forcible arguments as we could otherwise do against restrictions on our trade,

these foreign governments claiming, with some show of reason, that they have better opportunities for learning of disease among American cattle than are enjoyed by the American Government itself. It is time to put a stop to this anomalous condition, and I therefore earnestly recommend such an amendment to the law under which the Bureau is at present organized as will provide for such official national inspection as shall guaranty the fitness of our meat products for food consumption under the seal of the United States Government.

In connection with such amendment, I would also suggest that it be made adequate to cover such an observation in, and supervision of, the great meat markets of this country as will permit this Department to supply the stock-raisers of this country reliable information as to the character of stock commanding the highest prices. I conceive it to be of the greatest practical value to stock-raisers and farmers to know definitely what are the precise attributes which procure a price for certain kinds of stock far above the average, and whether the effect of such characteristics as weight, age, and quality, etc., upon the price, vary with different seasons of the year. In a word, I desire that the Bureau of Animal Industry be enabled to supply to the farmers such information relating to their industry as it is impossible for them to obtain by their own unaided efforts.

The investigations of the Bureau have been the means of determining the nature and proper treatment of many outbreaks of disease among our domesticated animals, which would otherwise have excited great alarm and led to heavy losses. The scientific researches, though they have accomplished much, are not yet by any means complete, and should be continued and extended till the field is thoroughly covered. The laboratory facilities of the Department are utterly inadequate for conducting this work according to the exacting requirements of modern science. Some diseases are communicable to mankind and can not be investigated because the laboratories are not sufficiently isolated from the remainder of the building, where many persons are employed.

DISEASE EXPERIMENT STATION.

The experimental station now established on rented ground requires enlargement and extension and all the facilities that science can provide for the effectual prosecution of this most important work, which means the saving of many millions of dollars annually to the producers of this country. I would propose, therefore, that 300 acres of the Arlington estate should be set aside for the use of this Department. This land is now unemployed, and being the property of the Government should be made available without further expense than that of removing to it the plant and equipment of the present station. I wish to earnestly insist upon the fact that foreign countries furnishing the most formidable competition in the markets of the world to our American

producers have adopted the most approved means which science affords to secure for their products an immunity which will procure for them the confidence of purchasers the world over. In work of this kind the United States Government must not be behind any other; indeed, in view of the importance of the interests involved, and American determination to be ever in the van, this country ought to lead all others in the prosecution of the work I have indicated.

To meet the many demands for more information in regard to animal diseases, a series of works are now in preparation giving a systematic statement of the current knowledge on the subject, prepared in popular form. Such publications, if properly revised and reissued from time to time, so that they may give the latest attainable information, will be of permanent and increasing value.

In addition to its other duties, the Bureau has had charge of the quarantine stations of the country. I have made certain needed improvements at some of the stations in order to better provide for the comfort and care of imported cattle while in quarantine. The stations have been successfully maintained and no case of disease has been introduced into the country during the year.

The work of the Bureau as a whole has been of great value, but it has been too restricted in its nature, and it should be extended so that all the different branches of the animal industry would be properly represented in the investigations; and this naturally leads me to a consideration of

THE DAIRY INTERESTS.

The dairy interest is attaining very large prominence in American agriculture. Between 1850 and 1880 the census aggregates of cows on farms increased from 6,000,000 to 12,000,000, and the last estimates of this Department exceeded 15,000,000, including those in towns or villages, and the grand aggregate must exceed 16,000,000. The last census reported a butter product of 806,682,071 pounds. It was not less than 900,000,000 pounds, inclusive of cows not on farms. If the increase has been equal to the increment of population, the present aggregate can not be much less than 1,300,000,000 pounds. The cheese product may approximate 400,000,000 pounds, of which a goodly portion is exported, but the exports of butter have been small in amount and poor in quality.

I propose to establish in the Bureau of Animal Industry a special Division devoted exclusively to the service of this great dairy interest. Dairying, when properly conducted, is unquestionably a most profitable branch of farming. The fact, also, that it supplies our people with one of the most complete and healthful of all foods gives it another claim to our consideration. Such products as butter and cheese are admirably adapted for transportation to distant markets, permitting, as they do, a remarkable concentration of bulk in proportion to value, and taking comparatively little from the fertility of the soil.

A car-load of butter can be transported with comparatively little more expense than a car-load of steers, although the first represents five or six times the value of the latter. Foreign dairymen find profitable markets for their surplus product in Great Britain and in South America, and that fact suggests a similar opportunity for our American dairymen, emphasized by the recent award at Paris of a gold medal to American butter.

In an effort, however, to extend our butter and cheese trade in foreign markets, I wish to insist on the fact that absolute purity must be maintained and that the tastes of the foreign consumers must be consulted, not only as to keeping qualities and flavor, but also as to form or package and color. To enable our dairymen to succeed in this they must be informed as to these peculiarities of foreign taste, and such information this Department should be enabled, with the assistance of our consular service, to supply. The existence of a steady home demand for the superior grades of butter indicates that in this industry there is no danger of overloading the market. The extraordinary improvements introduced of late years into the process of butter-making merit a closer scrutiny and observation than the individual farmer and dairyman can afford to give, and which it should be within the province of this Department to undertake for his benefit. The plans I have formed for the encouragement of our butter interest imperatively demand the establishment of such a special division devoted to this subject.

POULTRY.

The time has come when the importance of the poultry interests should be recognized in this Department. The poultry products of the United States had a farm value of at least \$200,000,000 last year, and no less than 16,000,000 dozen eggs were imported at a first cost of over 15 cents per dozen, or nearly \$2,500,000, while the average annual value of such importation during the past four years has been \$2,216,326. Such facts emphasize the necessity for encouraging the increase of domestic fowls of all kinds, and they further indicate beyond question that this industry is important enough to demand the special consideration of this Department.

The economics of rearing and feeding, the peculiar adaptation of the breeds to specific uses, merit more official attention than has heretofore been given to these subjects.

SHEEP AND WOOL.

The importance of sheep-husbandry demands the especial consideration of the Department at this time. The economics of breeding and feeding, with reference to a growing branch of the meat supply, requires the aid of scientific experiment and practical skill to produce the largest equivalent of flesh for the feed consumed.

The rapid increase and consumption of mutton is indicated by an enlargement of the receipt of sheep at Chicago and St. Louis, from 544,627 in 1875 to 1,971,683 in 1888. The increase in New York during the same period amounts to 750,000.

A canvass of the principal cities of the country would evidently show that consumption has doubled, a rate of increase twice as rapid as the advance of population. The healthfulness of mutton, its suitability for summer use in warm climates, and its growing popularity as highly-fed animals of the best mutton breeds become more common in our markets, contribute to the rapidly enlarging demand. It is important that this branch of sheep raising should receive greater attention.

The wool industry probably represents \$300,000,000 per annum, and the native wool product is four times as large as in 1860, while the average fleece weighs as much as two of that date. Prior to that time there was a slow increase of numbers and small advances in quality or weight. Large classes of goods which could not be produced in this country, as was claimed by importers and half believed by consumers, are now produced here in nearly full supply of the home demand. Their manufacture was rendered possible first by the effect of the war premium on gold and afterwards by the influence of the tariff of 1867.

The result of this development has been that growers have received hundreds of millions of dollars which would otherwise have gone to the Argentine Republic, Australia, and other countries. It has created a reliable supply of home-grown raw material for our manufactures, and an evenner and better quality of wool than that handled by nations depending on the growth of all climates, a better average quality of goods than those of foreign manufacturers, and a steady reduction of price through competition.

I respectfully call your attention to a fact full of significance in this connection. There has recently been serious interruption to the prosperity of wool-growers. Since the reduction of the tariff of 1883 the numbers of sheep have apparently been reduced about seven millions, and the importation of wool has increased from 78,350,651 pounds in 1884 to 126,487,729 the past year. Upon the sheep and wool industry of this country the burden of that loss has fallen, while our manufacturers have contributed so much additional money to foreign markets. Wool-growers are despondent in view of low prices of wool, and their interests are threatened in consequence.

On behalf of this industry I commend these facts to you, and should they be submitted to Congress I ask for them intelligent and careful consideration.

It is to be assumed that when Congress, in its wisdom, raised this Department to its present dignity, and made its chief a Cabinet officer, the intention of our law-makers was not simply to add the luster of official dignity to an industry already dignified by the labor of its votaries, but

to give it added influence and power for good in their behalf. It will not be amiss, then, if here and now I venture to offer some facts no doubt already familiar to you, but which strikingly emphasize the vast aggregate importance of the interests which it is the primary object of this Department to serve.

As far back as 1880 the value of the farms of the United States exceeded ten thousand million dollars. To the unremitting industry of their owners these farms yielded an aggregate annual value of nearly four thousand million dollars, in the production of which a vast population of nearly eight million of toilers utilized nearly half a billion worth of farm implements. The value of live-stock on farms, estimated in the last census to be worth over one thousand five hundred million of dollars, is shown by the reliable statistics collected by this Department to be worth to-day two thousand five hundred and seven million dollars. A low estimate of the number of farmers and farm laborers employed on our five million farms places it at nearly ten million persons, representing thirty million people, or nearly one-half of our present population.

These few figures are surely enough in themselves to convince every thoughtful man of the responsibilities thrown upon the Department of Agriculture, but even they do not permit of a realization of their full portent, unless the correlation of agriculture with the other industries of this country be properly considered. It may be broadly stated that upon the productiveness of our agriculture and the prosperity of our farmers the entire wealth and prosperity of the whole nation depend. The trade and commerce of this vast country of which we so proudly boast, the transportation facilities so wonderfully developed during the past quarter of a century, are all possible only because the underlying industry of them all, agriculture, has called them into being. Even the product of our mines is only valuable because of the commerce and the wealth created by our agriculture. These are strong assertions, but they are assertions fully justified by the facts and recognized the world over by the highest authorities in political economy.

No wonder, then, that I appeal earnestly and confidently for such support as will enable me to acquit myself creditably in the position to which your confidence has assigned me, and to see to it that the great work entrusted to my direction is efficiently performed. Throughout the country from time to time, and at all times in some parts of this great country we find agriculture suffering from depression, to diagnose the cause of which is oftentimes a difficult matter for publicists and political economists, while our law-makers, both State and national, find their most difficult task in the delicate duty of so adjusting the respective rights of every class of our citizens as to secure to each the full benefits of their industry. This is neither the time nor place to analyze causes of agricultural depression nor to discuss at length the many panaceas proposed for its relief, but I do feel that the agencies which already exist

primarily for the benefit of the industrial classes must be extended to the full for the advantage of the tiller of the soil.

Protection of American industries is one of the rock-rooted principles of the great party which this administration represents. To all the protection that wise tariff laws can afford, and to the fullest extent compatible with the equal rights of all classes, which is a fundamental principle of republican institutions, the farming industry justly claims its inalienable right. In the diversification of agriculture, which, I am thankful to say, has taken place during the past few years, and which I hope it will be in my power to greatly encourage, the farmer has been enabled to produce many articles comparatively unknown as a home product twenty years ago. For all such articles as our own soil can produce the farmer justly asks that protection which will insure to him all the benefits of our home market.

Another agency looking to the important well-being of the farmer is that which was called into being by the creation of this Department, an agency which, energetically and judiciously directed, will not fail of its purpose. Great as are our crops in the aggregate, it must be admitted that our broad acres are not as prolific as they should be, and I am convinced that, with the aid which can be afforded to agriculture by carrying out to the full the purposes for which this Department exists, and thanks to the rapid growth of intelligence and the remarkable efforts at self-help among our farmers, the yield of every tillable acre in this country can be increased 50 per cent. More than this will science, properly directed, enable us to accomplish, for millions of acres at present unproductive can, by its application, be rendered fertile. The great nations of Europe strain every effort to make science the hand-maid of war; let it be the glory of the great American people to make science the hand-maid of agriculture.

Such is the history of the year's operations of this Department, and such the condition and needs of the interests committed to its charge. I conclude this report with the expression of my thanks for the hearty co-operation and faithful service which the officers, clerks, employés, and correspondents of the Department have at all times given me.

Very respectfully, your obedient servant,

J. M. RUSK,
Secretary.

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